



SEQUENCE LISTING

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Maher, Kaija  
Kilpatrick, David R.  
Pallansch, Mark A.

<120> TYPING OF HUMAN NON-POLIO ENTEROVIRUSES

<130> 14114.0353U2

<140> 09/937,862

<141> 2001-09-28

<150> PCT/US00/07828

<151> 2000-03-24

<150> 60/127,464

<151> 1999-03-31

<160> 89

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 1

gcertgcaatg ayttctcwggt

20

<210> 2

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> misc\_feature

<222> (1)...(18)

<223> n = a, t, c or g

<400> 2

ngcncddgat tgntgsc

18

<210> 3

<211> 20

<212> DNA

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<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> misc\_feature

<222> (1)...(20)

<223> n = a, t, c or g

<400> 3

gcncngayt gntgnccraa

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<210> 4

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> misc\_feature

<222> (1)...(20)

<223> n = a, t, c or g

<400> 4

atgtaygtnc cncnggngg

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<210> 5

<211> 20

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<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> misc\_feature

<222> (1)...(20)

<223> n = a, t, c or g

<400> 5

ggngcrttnc cytcngtcca

20

<210> 6

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> misc\_feature

<222> (1)...(20)

<223> n = a, t, c or g

<400> 6 acrtgncnng tytgcattgt	20
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<220> <223> Description of Artificial Sequence; Note = synthetic construct	
<221> misc_feature <222> (1)...(18) <223> n = a, t, c or g	
<400> 7 awnttytayg ayggntgg	18
<210> 8 <211> 20 <212> DNA <213> Artificial Sequence	
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<221> misc_feature <222> (1)...(20) <223> n = a, t, c or g	
<400> 8 tananngtnc ccatrttrtt	20
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<220> <223> Description of Artificial Sequence; Note = synthetic construct	
<221> misc_feature <222> (1)...(20) <223> n = a, t, c or g	
<400> 9 atgtayrtnc cnmcnggngc	20
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<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> misc\_feature  
<222> (1)...(20)  
<223> n = a, t, c or g

<400> 10  
ggnggnggrt cngtnakytt

20

<210> 11  
<211> 20  
<212> DNA  
<213> Artificial Sequence

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<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> misc\_feature  
<222> (1)...(20)  
<223> n = a, t, c or g

<400> 11  
gangaraayc tnatngarac

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<210> 12  
<211> 19  
<212> DNA  
<213> Artificial Sequence

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<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> misc\_feature  
<222> (1)...(19)  
<223> n = a, t, c or g

<400> 12  
cccatnakrt cnatrtccc

19

<210> 13  
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synthetic construct

<221> misc\_feature  
<222> (1)...(20)  
<223> n = a, t, c or g

<400> 13  
gtrctyacna nnagrtcyct

20

<210> 14  
<211> 19  
<212> DNA  
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<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> misc\_feature  
<222> (1)...(19)  
<223> n = a, t, c or g

<400> 14  
tsaarytgtg caargacac

19

<210> 15  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> misc\_feature  
<222> (1)...(18)  
<223> n = a, t, c or g

<400> 15  
stgyccagat ttcagtgt

18

<210> 16  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> misc\_feature  
<222> (1)...(20)  
<223> n = a, t, c or g

<400> 16  
ggnacncayr tnathtggga

20

<210> 17  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> misc\_feature  
 <222> (1)...(20)  
 <223> n = a, t, c or g

<400> 17  
 gccntrttnt grtgncraa

20

<210> 18  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence; Note =  
 synthetic construct

<221> misc\_feature  
 <222> (1)...(20)  
 <223> n = a, t, c or g

<400> 18  
 ggnacncayr tnrtntggga

20

<210> 19  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence; Note =  
 synthetic construct

<221> misc\_feature  
 <222> (1)...(20)  
 <223> n = a, t, c or g

<400> 19  
 acngcngyng aracngnca

20

<210> 20  
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 <213> Artificial Sequence

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 <223> Description of Artificial Sequence; Note =  
 synthetic construct

<221> misc\_feature  
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 <223> n = a, t, c or g

<400> 20  
 acngcngtng aracnggng

19

<210> 21  
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 <212> DNA  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
 synthetic construct

<221> misc\_feature

<222> (1)...(20)

<223> n = a, t, c or g

<400> 21

cargcngcng aracnggngc

20

<210> 22

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
 synthetic construct

<221> misc\_feature

<222> (1)...(19)

<223> n = a, t, c or g

<400> 22

cnccnggngg nayrwacat

19

<210> 23

<211> 888

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
 synthetic construct

<400> 23

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gtacaaaa	ata	caacacaatc	aggacctact	cattcaaaa	aggttccagc	attaacagca	120
gtggaaa	acag	gtgctactag	tcaagtagaa	ccagggtgact	tgattgaaac	cagacatggt	180
ataaacat	ga	gacaaagatc	tgaagcatct	atcgaatctt	tctttggccg	atccgcatgt	240
gttgcgata	c	ttggtttg	tc	aaacgccaaa	ccaactgaca	caaacaccaa	300
aaaacatg	ga	gaatatcata	tttagaaact	caccaactca	gaagaaaact	tgagttcttt	360
acgtactca	a	ggtttgattt	ggaaatgacc	atagtaatta	cagagagggt	tttcaatgca	420
gtcaatgtc	c	cattgcgcaa	ttatgtgtac	caaataatgt	acgttcccc	aggtgctcca	480
gaaccaca	aat	catgggatga	ttacacgtgg	caatcttcta	ccaacccatc	aatattctac	540
accactgg	aa	atgctcctcc	cagagtgtca	attccatttg	ttggaatagg	gtctgcatat	600
tcacacttt	t	atgatggttt	ctcacagatt	cctcttgact	caatcagtgc	tggagcaagt	660
aataagtat	g	gttacacttc	aatcaatgac	tttggtaccc	tggcaattag	aatagtaa	720
gaatatgac	c	cagtgcgaagt	ggatgcaaag	gcccagagtgt	atattaaacc	caaacatggt	780
cgcattgtg	gt	gccccagacc	accacggg	cc	atgccttaca	agaatagcac	840
gacccatcag		caactgta	at	gacccaagtc	gcagacatca	ggacgtat	888

&lt;210&gt; 24

&lt;211&gt; 882

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 24

ggagatccag	tggaagactt	aatcgccaat	acagttgcta	ggactctaga	gagaataacc	60
tctccaactc	ataatacaac	ggcaggcaac	accaccgtta	gcgagcacag	catcggtacc	120
ggttcagtg	ctgcgttgca	agctgctgag	actggggctt	cgtctaacac	cacagatgag	180
agtatgatag	aaacacggtg	tgttgctaat	aggaatggag	tgattgagac	tagcatcaac	240
catttcttct	cccagcggtg	gcttggtgga	gtgctgaaca	tacttgatgg	aggcacctca	300
aaaggctttg	aagtttggga	tatagacatc	atgggctttg	ttcagcttcg	cagaaagcta	360
gagatgttca	cctacatgcg	gttcaacgct	gaattcacct	ttgtcgcgac	tttgagtgc	420
ggaacaactc	cccatataat	gttgcaatac	atgtatgtgc	cccctggagc	tcccaaacct	480
caggaaagag	attcattcca	atggcagact	gcaaccaacc	catccgtggt	tgcgaaaatg	540
agtgaccctc	ctccgcaagt	ttcagtacct	ttcatgtctc	ctgctagcgc	ctaccagtgg	600
ttttatgatg	ggtacccaac	atgtgatgat	agaccacaga	cctctaatacg	tccctacgga	660
caatgcccc	ataacatggt	gggcacattc	gcggtgcgca	ttgttagcaa	gacgcctgcg	720
gagagagact	tgcgcgctccg	tgtttacatg	aaactgaagc	atgtgcgagc	atgggtaccg	780
cgacccataa	ggtcacagcc	ttacgtcttg	aagaactacc	ccaactatga	tggaacccaa	840
atcgtgccca	gtgccaaaga	tcgagaagac	ataaagaaca	ca		882

&lt;210&gt; 25

&lt;211&gt; 915

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 25

ggtgatgcaa	tcgctgatgc	tatacaaaac	acagttacat	ctactataca	gagagtcaca	60
accaacactg	ttgggcaaga	tgcaacagct	gctaacacag	caccagctc	tcatagtttg	120
aacactggcc	tagtccccgc	gcttcaagct	gctgagacag	gagcttcac	cacagccacg	180
gatgggaatt	tgattgagac	tagatgtgtt	gtaaactcca	atggtacacg	tgaaacccac	240
attgagcatt	tcttctctag	gtcagggctg	gtgggagtta	tggaggtaga	tgatacgggt	300
actagtggca	agggattctc	aaactgggac	attgacatca	tggcgtttgt	gcaactgcgc	360
cgtaaactcg	aggcatttac	atatatgcgg	ttcgacgcag	agtttacctt	tgtcaccaat	420
ttggagaacg	ggctcacgaa	taatagtgtg	atacagtaca	tgtatgtacc	acctggagcg	480
cctaaacccg	atgcccggga	atcattccag	tggaactg	caaccaatcc	gtcagtcctt	540
caaaaatgg	acagtccgcc	acctcaagtt	tcagtaccct	tcatgtcacc	agccagtggc	600
tatcaatggt	tctatgacgg	ttaccccacc	tttgggcccc	actcgagac	atctaatacta	660
tcttacgggc	aatgtcccaa	taatatgctg	ggaacattct	cggccagggt	tgtagcaag	720
caaatcacca	atcagaaatt	ccagatccgt	atztatctac	ggctgaagag	ggtgagggcg	780
tggatcccca	gacctttgag	atcgagccg	tacatttaca	gaaactaccc	cacctatggt	840
actaccatcc	aatacctggc	caaagatagg	cgcaagatca	ctgaaactga	ttataatgct	900
gaacagcgca	cgcat					915

&lt;210&gt; 26

&lt;211&gt; 885

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 26

ggcagaccaa	ttgcagatat	aatagaagga	gcagtagctc	aaactaccac	cagagcacta	60
agtggaccaa	ttcagccagt	gacagcggcc	aacacctctc	ccagttcaca	tgggcttggt	120
acggggcaag	tgccagcttt	gcaagcagca	gaaacgggag	ccacctcgaa	tgcgaccgac	180
gagagtttga	ttgaaaccag	gtgtgtgggc	aacagacatg	gagtcatgga	aactagcatt	240
gaacacttct	tttcacgctc	aggttggca	ggaattttga	taattgagga	ctccggtact	300
tccacgaaag	gctacgccac	ttgggaaalc	gatgttatgg	gatttgtcca	gctgaggcgt	360
aaactagaga	tgttcacata	catgcgattt	gatgcagagt	tcacctttat	cacagcagaa	420
aggaatggca	acaccagccc	aatacccatc	cagtacatgt	atgtcccacc	cggagcccca	480
gtccctactg	gtagggagac	attccaatgg	caaacagcga	ccaatccatc	cgtgatctca	540
aagatgactg	atccaccagc	ccaggtgtct	gtaccattta	tgagcccagc	cagtacttat	600
caatggttct	acgatggcta	ccccacgttc	ggagaagttc	cagtgactac	gaacttgaac	660
tatggacagt	gccccaaaca	caaaatgggc	actttctgca	tccgcatggg	ctcaggtgta	720
tctacaggca	aggacgtcac	tgtgcgcatt	ttcatgaagt	tgaagcatgt	gcgcgcctgg	780
gtgccaaggc	ccatcaggag	ccagccttac	ttgttaaaga	attatcccaa	ctttgacaag	840
tcaaattatg	tagacgcata	atcgaacagg	acataacca	ccact		885

&lt;210&gt; 27

&lt;211&gt; 915

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 27

aatgacccca	tttcaaatgc	aatagaaaat	gctgtgagca	cactcgctga	caccacgata	60
tcacgtgtta	cagcggccaa	cactgctgct	agctcccatt	cccttggtac	tggacgcgtg	120
ccggcgttgc	aggctgcgga	gacaggggca	agttccaacg	ctagcgatga	gaacctgatt	180
gaaactcggt	gtgtgatgaa	tagaaatgga	gttaacgaag	caagtgtaga	acacttctac	240
tcccgctgcag	ggctagtagg	agttgtggag	gtgaaagact	caggcactag	tcaggacggg	300
tacacgggtgt	ggcccataga	tgtgatgggc	tttgtgcaac	agcggcgcaa	gttagagcta	360
tctacttaca	tgcgctttga	cgctgaattt	acctttgtgt	ccaatctcaa	tgacagcaca	420
acacccggca	tgtatttgca	gtacatgtac	gtgccgcggg	gtgcgcccaa	accagacggt	480
aggaagtcat	atcaatggca	aacagccacc	aaccttcaa	tattcgcaaa	gttgagtgc	540
ccaccgcccc	aagtgtctgt	ccatttcatt	tcaccggcgt	cagcctacca	gtgggtctac	600
gatggttacc	ccacgtttgg	cgaacacaag	caagctacta	atttacaata	cggtcagtgc	660
cctaacaaca	tgatggggca	ttttgtctatt	cggacagtta	gtgaatccac	caccgggaaa	720
aatgtccatg	tccgggtgta	catgagaatt	aagcacgtaa	gagcatgggt	gcccagacct	780
ttcagatccc	aagcttacat	ggtcaaaaac	taccgcacat	acagccaaac	aatatccaat	840
actgcagccg	atcgtgcgag	cataaccact	acggactatg	aggggtggcgt	accagcaaac	900
ccgcagagaa	ctttt					915

&lt;210&gt; 28

&lt;211&gt; 888

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 28

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ggagacgaaa tactcgacct aatcgagagt gctgtacaga ataccactaa agccattacc      60
agctcaatcg acacaaaaac tgggtgctaac actcaagcta gccaacatcg tataggcttg      120
ggggaggttc ccgctcttca agctgctgag acaggatcgt cttecgctcgt ttccggacaag      180
aacatgatag aaacaagggtg tgtcgtaaac aaacacagca cagaggaaac cagcattaca      240
aactttctact ccaggggcggg cctagtgggg gttgtgaaca tgccagtaca aggaaccagc      300
aacacaaagg gtttcgcaaa gtgggggata gatataatgg gctttgtgca gatgaggcgc      360
aaacttgagc tcatgacata catgagattc tccgccgagt ttacgttcgt acccagcact      420
cctgggggag agactactaa ccttatactg caatacatgt atgcacctcc cggagctccg      480
ctgccaacca ggcgggattc atacgaatgg caaacatcca ctaaccctcc tattatcagc      540
aagatggcgg acccaccgcg tcaggatatcg gttccattcc tttctcctgc atcagcatat      600
cagtgggttc atgatggcta cccacattt gggaaacacc caatagatca ggacttccaa      660
tatggcatgt gcccaaaca catgatggg acallclgly tggcgatgat cgggtggggc      720
aaaccgacct aatcagttac catacgtata tacatgagat taaagcatat ccgtgcatgg      780
gtgccccggc cactgaggag tcagaattac actatgagga attaccgaa ctacaacggg      840
ggcgcaataa aatgtacatc aaaaagcaga gctaccataa caacctta      888

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<210> 29

<211> 882

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 29

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ggagattcca ttgaagacat aataagcaac actgtcaccc gtacactgca acaaatcagt      60
gccccatcac acgacactac agcagccaac acctcagtga gtaatcataa aattgggtacg      120
ggggatgtcc cagctctcca agctgcagag actggcgcta ctccaatgc ctccagacgag      180
aacatgattg agacacgatg tgtgttaaata cgcaatgggg ttgtggaaac tagtttgagc      240
catttctttt caagagcagg ccttgtggga gtgatcaatg tgcaagatgg cggcactcag      300
aagggttttg aagtgtggga catagatgtc atggggtttg ttcaactcag gaggaagtgt      360
gagatgttca cgtacatgag gttcaacgcc gagttcacat tcgtatccac actcgcggat      420
ggcacaactc ccagagtgat gttgcagtac atgtacgttc cacctgggtgc ccccaaacct      480
caggagagag attcgtttca gtggcaaac gcaaccaacc catcagtatt ttgcaaaatg      540
agtgaccctc ctccacaggt ttccgttcc ttcattgtcac cagctagtgc ctaccaatgg      600
ttctacgatg ggtacccaac attcgatgat cgaccggcca cctcaaacca cccgtacggg      660
cagtgcacca ataactgat gggcacattc gcagtgcggg ttgtcagcaa gacccagcc      720
acacgggatc tgcgtgtcag agtgtacatg cgcctgaaac acgtgcgcgc atgggtaccg      780
agacctatcc gatctcaacc ctatattttg aaaaactacc caaattatga tggcacaaaag      840
ataacgtcga catctaagga taggcaaagc atcaaaaaca ca      888

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<210> 30

<211> 894

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 30

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ggcgaccccc tggaggacat catccacgac gctttgagca gcactgtgcg gcgggccata      60
actagtggtc aagatgtcaa cacagcggcc ggtaccgctc ctagtctctca caggttggag      120
actggctcgtg ttcccgcctt acaagcagca gaaactggag ccacttctaa cgctacagat      180
gagaacatga tagaaacgcg gtgtgtcatg aacagaaatg gagtgttgga ggcgactata      240
agtcattttc tctcacgctc aggtttggtg ggtgttgtca atctaactga cggaggcacc      300
gatacaacgg gatatgcagt gtgggacatt gacatcatgg gttttgtgca actgcggcgg      360
aaatgtgaga tgttcacata catgagattc aacgctgagt tcacattcgt cactacaaca      420

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gaaaatggcg	aggcaaggcc	atztatgtta	cagtatatgt	atgtacctcc	aggtgcccct	480
aagccaacgg	gtagagatgc	ttttcagtg	caaacagcga	caaatccatc	cgttttcggt	540
aagctcacag	atccacctgc	tcaggatatca	gtcccccttc	tgtaacctgc	tagtgccctac	600
caatggttct	atgacgggta	tccaacattt	ggacaacacc	cggaaacatc	taatacaaca	660
tatggacagt	gccctaacaa	catgatgggg	acctttgctg	tgagagtagt	gagtagagtg	720
gctagccagc	tcaaaactaca	gacacgagtg	tatatgaagc	ttaagcatgt	gagagcatgg	780
atccctaggc	caataagatc	ccagccttac	ctcctaaaga	attttcctaaa	ttatgatagt	840
agtaagatca	catacagcgc	aagagatcgt	gccagcataa	aacaagctaa	tatg	894

&lt;210&gt; 31

&lt;211&gt; 912

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 31

gggccaatag	aagaaatcat	ctcaactgtt	gccagtaacg	cgttggcgct	cagtcaaccc	60
aagccagtg	acaactctgt	acaaaacacc	caacaaagt	ctccagtgc	tagccaggag	120
gtgccagcat	tgaccgcagt	ggagacaggg	gcgacaagt	atgtgggtcc	atctgacct	180
attcagacta	gacacgtatt	gaatgttaaa	tccaggtctg	aatccaccat	cgagtcattt	240
tttgcaagag	ctgcatgtgt	aaccattatg	caggtggaca	atttcaacgc	aacctctgtg	300
gaagacaaaa	gaaagtgtgt	tgctaaatgg	gcaatcacct	acactgatac	cgtccagctg	360
agacggaaat	tagagttttt	cacttattct	agatttgact	tagagatgac	ttttgtgcta	420
actgagagat	actactccca	aagctcaggg	catgctagat	ctcaggtgta	ccaaattatg	480
tatgttccac	caggggcacc	cacgcctagt	gcatgggacg	actacacatg	gcaaacatcc	540
tccaacccat	ccattttctt	taccaccggc	aatgcaccac	cgcgcatttc	aattccattt	600
gttggaatcg	ccaatgcata	ctcacacttt	tatgatggct	ttagtagagt	acctttggag	660
ggagaaacaa	cagacacagg	agacgcttac	tacgggctca	cttcaataaa	cgattttggt	720
acacttgcat	tcagggtagt	taatgactac	aaccagcca	gggtggagac	aaggattaga	780
gtatacatga	agcccaaaca	tgtgagagtc	tggtgcccgc	gacctccaag	agcggtaagc	840
tacagaggac	ctggagtcga	cctcctatca	acatcagtaa	cacctttatc	caaacatgac	900
ctagcgacat	ac					912

&lt;210&gt; 32

&lt;211&gt; 888

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 32

ggagatacag	tgagtgatat	gatcgaaaat	tccatcaacc	gaattaccag	tgcaattttcc	60
actacccaga	cacaccagac	agcagctgac	actagagtta	gtacacacag	gttaggcacg	120
ggggaggtgc	cacctttaca	agcagcagag	acagggtgcca	cctccaacgc	aaccgacgag	180
aacatgattg	aaacacgctg	tgctgtcaac	aggcacgggg	tgagcgagac	cagcgtggaa	240
tacttcttct	ctcgtctctg	tttggcagga	atagtcacgc	tggaggatgc	aactgccact	300
aataagggtt	atgccacatg	ggagattgat	gtcatggggt	tcgcgcaact	gcgtcgcaag	360
ctggagatct	tcacatacat	gcgcttcgat	gcagagttca	cttttgtggc	aacagaacgc	420
aatgggagca	ccagcccggg	catgatgcag	tacatgttcg	tgccccctgg	cgcacctgtt	480
ccaacaggga	gagatacctt	ccaatggcaa	tctgttacta	acccttcagt	gctagtataa	540
atgacggatc	caccggccca	agttgccatc	ccctttatgt	ctccagctag	tgcataccaa	600
tggttctatg	atggatatcc	tacctttgga	gaaagaccag	ttacaaccaa	catgaattat	660
ggacagtgtc	ccaacaacaa	aatgggaact	ttttgtatac	gcactgtctc	cgggtgaagc	720
tcagggaata	acatcactat	acgtattttt	atgaggttga	agcatgtaag	agcgtgggtg	780

```
cctcgcccaa ttagaagcca gctatatctg cttaaaaatt accccaactt tgataaacact 840
aagatcctca acgcctccca caacagagct tctatcacat caaacaca 888
```

```
<210> 33
<211> 927
<212> DNA
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence; Note =
        synthetic construct
```

```
<400> 33
gggttggaag atctaataca acaagttgcg tctaacgcat tacaattgtc ccagccaaca 60
agaccggcac tcccaccagc cgagcagagt gtccccaaca ctaaccaaac aactccagaa 120
cactccaagg aagtcccagc gttaacggca gttgaaactg gcgccacgaa tcctctagag 180
cctggcgaca cagttcagac tagacatgtg atacaaacta gaagtagaag tgaaagtaca 240
gtggagtctt tctttgcgcg aggtgcatgt gtaaccatta tgggagtgga caactataat 300
gagacattga aaggagacca gaagtctact ctatttacia cctggaacat cacctacact 360
gacacagtcc agctacggag aaaactggaa atgttcactt actccagggt tgacatcgag 420
tttacttttg tggtgactga acgctactac tcatcaaaca gtgggcatgc tctgaaccaa 480
gtgtacaaa ttatgtatgt accacctgga gcaccagtgc caaagaaatg ggatgattac 540
acctggcaaa cctcttcaaa cccgtccata ttctacactt atgggtcagc accaccagg 600
atatccatac cttttgtggg tatagcaaac gcttactccc acttctatga tgggtatgcg 660
acagtgcctt tgaaaactga caccacagac tcaggagcag cctactatgg agcagtatcc 720
ataaacgact tcggactgct tgcagttcgc gtcgtcaatg aacataatcc agtcagagta 780
tcatccaaaa ttagagtgtg tatgaaacca aaacatgtca gggtatgggt tcccagacct 840
ccaagggctg tagagtatta tggaccagga gtggactaca aggcaaacac tttaacaccg 900
ttgccaataa agaatttgac tacttat 927
```

```
<210> 34
<211> 888
<212> DNA
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence; Note =
        synthetic construct
```

```
<400> 34
ggtgacaaaag tggcagacat gattgagacc gcagtggaga agaccgtgtc ctactaact 60
tcccctattc aaacccccac agccgccaac acaaactgta gtaatcatcg aattgagctg 120
ggggaagtcc cggttttgca agctgctgaa accggcgca cgtctcttgt gtctgatgaa 180
tacttgatag agactcgttg tgtagtgaat agccatagta cagaggaaac tacagtgggg 240
cacttctttt caagagcggg gttggtggga gtgattgacc tcccattaca gggaacagtc 300
aacacaggag gattgcctc gtgggatatt gatgtaatgg gatatgttca gatgagaagg 360
aaacttgagc tgttcacata tgcccgttc gatgcggagt ttaccttcat agcttccacc 420
ccagatggcg aggtgaagcc agtgttctta cagtacatgt tcgtccccc tgggtgcacca 480
aaaccaacag ggcgaacac ctacgaatgg caaactgcaa caaaccttc tgtgttggtc 540
aagagcacag atcctccagc acaagtctct gtaccgttca tgtcaccagc cagcgcatat 600
cagtggttct atgacgggta cccaaccttt ggaaagcacc tgcctgctga tgactttcag 660
tacggtatga ccccaaataa catgatggga tcgttctgtg ccaggatagt gggggaagga 720
gcgcctagtg tacacttggt tatccgtatc tacatgcgca tgaaacacgt gcgggtgtgg 780
attccacgac ctatgcgcag ccagccatac gttgcgaaga attacctaa ctacaagggt 840
tctgagatca agtgcgcac atctagtctg aagtcaatca ccacatta 888
```

```
<210> 35
<211> 912
<212> DNA
```

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 35

gggccaatag	aggagatcat	ctcgaccgtc	gccagcaatg	cacttgccct	cagtcagcct	60
aaaccggtgg	ataattctgt	acaaaacacc	caacagagcg	cgcccgtgca	cagccaagag	120
gttccagcat	taacagcagt	agagactgga	gcaacaagtg	atgtggtgcc	agctgatcta	180
gtgcaaacca	ggcatgtagt	gaatgtcaag	tccagatctg	aglccactat	cgagtcgttc	240
tttgcaagag	ctgcctgcgt	gactattatg	caggttgata	actttaatgc	caccaccacg	300
gaggacaaga	ggaagttatt	tgccaaatgg	gccatcacat	acacagacac	agtacaattg	360
aggaggaaat	tggaattttt	cacgtactcc	aggttcgatc	ttgagatgac	tttcgtgcta	420
actgaaagat	actattctca	gagctcggga	cacgctagat	cgcaggtgta	tcaaatacatg	480
tacgtccctc	caggagcacc	aacaccaa	gcatgggatg	attacacgtg	gcagacgtct	540
tctaaccat	caattttctt	caccactggt	aacgcacccc	cacgggtttc	aatccccattt	600
gtgggcattg	caaagtctta	ctcacacttt	tatgatggct	tcagcagggt	acctttggaa	660
ggagagacca	ctgactcagg	tgacgcttat	tatggcctca	cttctatcaa	tgactttgga	720
acacttgtag	taagagtggg	caatgactac	aaccagcgga	gagtgagagac	aaggatcaga	780
gtctacatga	aacctaagca	tgtgagagtg	tggtgtccac	gacccctag	ggctgtgagc	840
tacagaggac	ccggtgtgga	cctactgtcc	acctcagtga	cgccctatc	taagcatgaa	900
ttgacaacgt	ac					912

<210> 36

<211> 918

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 36

ggcattgaag	acttgatcca	acaggttgca	tcgaatgcgc	tgcaaatactc	acagccgacg	60
cgtccggcac	tgccctctac	agaaagtctt	cccaacacac	aacaatcggc	accttcgcat	120
tctcaagagg	tcccggcgct	gacagcagtt	gagacaggcg	cgacaaatcc	attggagccg	180
tctgacacgg	tacaaacaag	gcatgttatc	cagactagat	ccaggtcaga	gtccacaata	240
gagtccttct	tcgcgcgtgg	tgcatgtgtg	acaatcatga	cagtggaaaa	ttttaacgcg	300
actgaggcgg	cagacaagaa	aaagttgttc	gccacttgga	atattacata	cacagacaca	360
gtgcagctca	gaaggaagtt	ggagatgttc	acttactctc	gatttgacat	tgaatttacc	420
tttgtcacca	cagaaaggta	ctacgccagt	aactcaggcc	atgcgcgtaa	tcagggtttac	480
caactcatgt	atgtaccccc	aggagccccct	gtgccacaac	aatgggatga	ttacacgtgg	540
caaacttcct	ccaacccatc	ggtgtttttac	acatacgggtg	acgctccagc	gcgcattttcc	600
ataccatttg	tagggatagc	taatgcctat	tcccactttt	atgacggcta	tgacgtgggtg	660
ccattgaaag	attccacca	ggatgctggt	gctgcctatt	atgggtgcaac	ctcaattaat	720
gatttttgaa	tggtggcggt	gagagtagtc	aacgaattca	accagccag	aatcacatct	780
aaattgagag	tgtacatgaa	accaaagcat	gttaggggtg	ggtgtcctag	accaccaagg	840
gtggtgccgt	acttcggacc	cggtgttgat	tataaggata	gtttgacacc	gctttctaca	900
aaagcactca	acacttat					918

<210> 37

<211> 927

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =

## synthetic construct

&lt;400&gt; 37

```

ggcttggaag acctcatcca acaagtggcc acgaatgcat tgagtctgtc gcagcccaca      60
agacccgcac ttccaccagc agaacaaagt gtgccaaaca ccagtcagac caccaccagaa      120
cattcaaagg aagtaccgcg actcactgca gtggagaccg gtgcaaccaa cccattggaa      180
ccaggtgaca cagtgcacaa tagacatgtt gttcaaacaa gatcaaggag cgaaagtacg      240
gtggaatctt tctttgcaag aggggcgtgt gtcacgatta tgggagttga caattacaat      300
gaaagcttga ccagtagtca aaaatccacc ctattcgcca cttggaatat tacatacact      360
gatacagtac agttgaggag aaaattggaa atgttcacct actccagali tgacattgaa      420
tttaccttcg tagtaactga acgttactac tcgtcaaaca gtggccatgc cttgaatcag      480
gtgtatcaaa tcatgtatgt gccaccaggc gctccaattc ctaagaagtg ggatgattat      540
acctggcaaa catcatcaaa cccctcaata ttctacacct atggaacagc accaccagaa      600
atttcgatcc cttttgtggg cattacaaac gcgtactcac atttttatga cggatatgcg      660
actgtaccac tcaagacaga cactacggat ccggggggcg ccttctatgg agcagtttcc      720
atcaatgact ttggtttgtt ggcggtgcca gttgtcaacg agcacaaccc ggtaagagtg      780
tcttcaaaga taagagtgtg catgaagcct aaacatgtca gagtgtgggtg cccacgacca      840
ccacgtgccg tggagtacta cggaccaggg gtagattaca aggcaaacac attgacacct      900
ctccctacca agaacttaac tacttat                                     927

```

&lt;210&gt; 38

&lt;211&gt; 888

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 38

```

ggtattgatg atatcataga taatgttgta accaatgctt tgaaggtgtc catgccacaa      60
gttcaagata cgcaatctag tggaccagtt aactcaaaag aagtacctgc attaacagct      120
gttgaaacag gggctactag tcaagttgac ccatcagacc taatagaaac tagacatgtt      180
attaataacc gcctcagatc tgagtgcaca atagaatcat tctttgggag gtcagcatgt      240
gtggccataa ttgggttatc taacaaaaaa cccaccagtg acaatgcagc caagctcttt      300
gctacatgga agattagtta tcttgatatg tatcaattga gaagaaaatt ggaattcttc      360
acatactcca gatttgatct tgagttaacc tttgtaattt cagaaagatt cttcacctca      420
acttcagctg ctgcaagaga ttatgtatac cagatcatgt acattcccc aggagcccct      480
atccctcagg tatgggatga ttacacatgg caatcatcca caaaccctc aatattctac      540
accacaggaa atgcatgcc tagagtgtcc atcccttttg ttgggatcgg tgcagcatac      600
tctcacttct atgatggatt ctcttttagta cctttcaata ccatcgatgc tggtgcttca      660
aacaggtacg ggtacaccac cataaatgat tttgggacta tggcaatcag gatagttaat      720
gaatacgacc cagtcacaaat tgatgcaaaa gtcagggttt acatgaaacc aaagcatatt      780
aaggtgtggg gccccagacc tccacgggca gtagcataca atgggccaac agtgaatttt      840
aatgaaaacc cccatgtaat gacagcagtt gctgatatta gaacttat                                     888

```

&lt;210&gt; 39

&lt;211&gt; 909

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 39

```

ggtatcgaag atcttatcac cgaagttgca agcaacgctc tgaagttgtc acaacaaaaa      60

```

```

cccagcacac aacagagttt accaaacact agtagctcag aaccaactca ctctcaggaa 120
gcgccggcat tgaccgcagt agaaacagga gcaactagta gcgtagtacc agctgatctg 180
gtccagacgc ggcatgtgat acaaacacgt agccgaagtg agtctacagt tgagtcattc 240
tttgctcggg gggcgtgtgt aacaatcatg tcagtggaaa attacaatga aaccgctatc 300
gcagagtcca aattattttac caagtggaaac attacctaca cagacacagt ccagttgaga 360
agaaaactag agatgttcac ataactccaga tttgatattg agttcacatt tgtggtgact 420
gagcgttacc actccgcaaa ctccaggtcat gcactaaatc aagtttacca gatcatgtat 480
gttcctccag gtgcaccagt gccacaaaga tgggacgact acacatggca aacgtcatcc 540
aaccctcag tctttttatac ctatgggtaca gcaccagcca gaatatcgat tccatatgta 600
ggcatagcca atgcctactc gcattttttat gatggcttcg ccaaagtgcc cattgaaggc 660
gagacgtcag atccaggtga tgcatactat ggtgcaacgt ccatcaatga tttcggcatc 720
ttagccatac gtgtggtcaa cgaacacaat ccagtgcaag tttcttcgaa gattagagtg 780
tacaatgaaac ctaaacatgt gcgcgttttg tgtcccagac cacctagagc tgttccatac 840
tttggtccccg gggttgatta taaaggtgac gccctcacac cactatcacg caaggattta 900
accacctat 909

```

&lt;210&gt; 40

&lt;211&gt; 888

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 40

```

gggattgagg atacaatcga aaaagtggtt ggtgatgctc taagggtctc aatgccacaa 60
gttgccaaca cccagccatc aggaccctga aattctaagg aagttccagc actgacagca 120
gtggaacacg gtgcaaccag tcaagtcacc cctgaagatt tgatcgaaac caggcatgtt 180
attaacaata gactaagatc tgagtgcact gtggaggcct tctttggaag gtctgcatgt 240
gttgccatcc ttggtgtggt aaacaaaaag ccagacacca caaatgccaa agacctcttt 300
acaacatgga ggatcactta cctgcaaaact tatcaactga ggaggaaact cgaactcttc 360
acgtattcta gatttgattt ggaattaacg tttgtcatta cagaaagata cttttcaggg 420
acagcagcca caaccagaga ttatgtttac caaataatgt atgtaccacc aggagcccc 480
ataccaaata cctgggacga ctacacctgg cagtcattct ccaaccctc tgtcttctac 540
accacaggca atgccagccc acgcatgtct ataccctttg ttggtatttg tgcgcctat 600
gctcactttt atgacgggtt cagtgtggtt ccattcaatc aaatagatgc aggagcatcc 660
aacaatatatg gctactcatc aatcaaagac tttggtacat tggcagttag aattgttaat 720
gagtttgatc cagtgacaat agaggctaaa gtcagagtgt acatgaaacc caaacatgtc 780
agggtgtggt gtccaagacc acctcgtgca gtaccatatt aaaactcatc agttgatttc 840
gcccaaaacg cagtagcaat gaaccaagta gccacaatta ggacgtat 888

```

&lt;210&gt; 41

&lt;211&gt; 915

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 41

```

ggtatcgaag ataccattga cactgtcatt aacaatgccc tacaactatc tcaaccacag 60
ccaaataagc agttgacagc tcagttctacc ccctccacaa gtggagtaaa ctcccaggag 120
gttccagctc tgaccgtgtg ggaaaccgtg gcctcgggac aagcagtgcc cagtgatgtg 180
attgagacca gacacgtggt taattataag acccgatctg aatctactct tgagtctttc 240
tttggaaagg cagcttgtgt caccataatt gaggtcgaga acttcaatgc cactagttaa 300
gcagacaaga ggaaacagtt caccacttgg ccaatcacat acaccaatac cgtgcaattg 360
cgcaggaaac tagaattctt cacttactcc aggtttgacc tagagatgac ctttgtagtg 420

```

acagaaagat	attatgccag	caacacaggt	cacgccagaa	accaagtgtg	tcaaataatg	480
tacattcctc	ctggtgcacc	acaacccaca	gcatgggatg	attacacgtg	gcaaagctct	540
tcgaatccgt	cagtctttta	cacttatggg	agtgtccac	ccaggatgtc	tataccgtat	600
gtcggtatcg	caaatgcata	ctctcttttt	tatgatgggt	ttgcacgagt	accactgaag	660
gacgaaacag	cggactcagg	tgatactttt	tacgggctag	tcaccatcaa	tgatttttga	720
accttagcaa	taagagtagt	gaatgaattt	aaccacagcta	ggattacatc	aaaaattaga	780
gtgtatatga	aaccaaagca	tgtaagatgc	tggtgcccta	gaccaccacg	tgcagtgcc	840
taccgtggtg	aaggagtaga	ttttaattca	agttcaatca	caccactaac	agcagtcgca	900
aacatcaaca	cattc					915

&lt;210&gt; 42

&lt;211&gt; 852

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 42

agcccagtg	aggaatccat	tgagagaagc	attggcagag	ttgctgacac	cattggtagt	60
ggaccatcca	attcggaggc	aataccggca	ctcacagcag	tagaaacagg	acacacatca	120
caggttacac	ctagtgcac	gatgcaaaca	agacatgtgc	acaactacca	ttcaaggtcc	180
gaatccagcg	tagagaactt	cctggcacgc	tcggcttggt	tgttttatac	aacatacacc	240
aacggtaaaa	aaaaaaatgc	cgccaaagag	aagaagtgtg	caacgtggaa	agtgaagtgt	300
agacaagccg	cccaactaag	aagaaagcta	gagttattca	catacttacg	ctgtgacatc	360
gaattaacat	tcgtcatcac	cagtgcacaa	gatccatcga	ccgctaccaa	cttggatgtg	420
ccagtgttga	cccatcaa	aatgtacgtc	ccacctgggt	gtccagtc	tgaaaccgtg	480
gacgattaca	actggcaaac	atctacaaat	cccagccttt	tttgactga	agggaaatga	540
cctccacgca	tgtcaattcc	attcatgagc	ataggcaatg	cctatagtat	gttctatgat	600
ggttgggtccg	agtttaggca	tgacgggtgtg	tacggcctga	atacccttaa	caatatgggc	660
acaatatatg	ctaggcacgt	caacgctgac	aaccacaggt	gcatcaccag	cacagtgaga	720
atatacttca	aacccaaaca	tgtcaaggca	tggtatcctc	gcccgcctcg	tttggcacag	780
tatcttaaag	ccaataatgt	gaattttgag	atcaccgatg	tgacagaaaa	gagagatagt	840
ctcacgacca	cg					852

&lt;210&gt; 43

&lt;211&gt; 846

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 43

agcccagtg	agggcgccat	agagagagcc	attgcacggg	tcgctgacac	tatgccaaagt	60
ggcccaacca	attcagaagc	agtgcctgcc	ctgacagcag	tggaacggg	ccacacctcc	120
caagtcgtcc	ccagtataa	catgcaaacc	aggcacgtga	agaagtacca	ttcacgtctc	180
gaaaccagcg	tcgagaactt	tctgtgtagg	tctgcatgtg	tatatattac	cacatataag	240
aaccagacag	gggcgaaaaa	tagatgtgct	tcttgggtaa	tcaccacaag	acaagtggcc	300
cagctcagga	gaaaactaga	aatgtttacg	tacttgctgt	tcgacattga	actcaccttt	360
gtcattacaa	gtgcgcaaga	ccaatccact	atttcccaag	acgcccctgt	gcagacacat	420
cagataatgt	acgtgccacc	gggaggccca	gtgccaaaca	aagttgacga	gtatgtgtgg	480
caaacatcca	cgaaccccag	cgtcttttgg	acgaggggta	acgctccacc	acgtatgtca	540
gttcccttta	tgagtatcgg	taatgcttat	agcacatttt	atgacgggtg	gtctgatttt	600
tcaaacaag	gaatatatgg	gttgaacacc	ttgaacaaca	tggaacatt	gtacatccgc	660
cacgttaacg	ggcccaaccc	agtaccaatt	accagcacag	tgaggatata	ctttaagccc	720
aagcatgtta	aggcctgggt	gcctaggcct	ccaaggcctt	gccagtacaa	aacgttttagg	780

caagtcaact ttacagtgac tggagtgacc gagagtaggg caaatataac caccatgaat 840  
actaca 846

<210> 44  
<211> 852  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 44  
ggtgatgtgc agaatgctgt cgaaggggct atggtcaggg tggcagatac agtgcaaact 60  
tcagccacaa actcagagag ggtgcctaac ttgacagcag tagaaactgg tcacacttcg 120  
caggtagtac ctggtgatac catgcagact agacatgtga tcaacaatca cgtgagggtca 180  
gaatctacaa ttgagaactt ccttgccaga tcagcgtgtg ttttcttcct agagtacaag 240  
acagggacca aagaggattc caatagcttc aacaattggg tgattacaac caggcgagtg 300  
gctcaactac gtagaaaact ggaaatgttt acttacctac ggtttgacat ggaaatcacc 360  
gtggctatta caagctcgca agatcagtct acatcacaaa accagaatgc accagtgtta 420  
acacaccaga taatgtatgt accaccaggg ggaccatac ccataagcgt ggatgattac 480  
agctggcaaa catccaccaa cccaggtatc ttttggaccg aagggaacgc tccggcacgc 540  
atgtcaattc catttattag cataggcaat gcgtatagta atttctacga tgggtggtct 600  
cacttctccc agactggcgt gtatggcttc actactctga acaacatggg tcaattgttc 660  
ttccggcacg taaacaagcc caaccagcc gctattacaa gtgtggcgcg catttacttc 720  
aaaccgaaac atgtacgcgc ttgggtgcct agaccaccgc gcttgtgtcc atacatcaat 780  
agcacgaatg tcaactttga acccaagcca gtgactgaag tacgtaccaa cataataaca 840  
acgggtgcct tc 852

<210> 45  
<211> 882  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 45  
ggagatgagg tgaagcatga acccacagtg gccaacacaa cagcaagtgg accatcaaact 60  
tcacaacaag taccggcact cacagcagtg gagactgggc acacctcaca ggtgggtcca 120  
agcgatacca taaaaccag acatgttcac aattaccata gtagaactga atccaccctg 180  
gagaacttcc tcggaagatc agcatgcgtg cacattgact cgtataagac caagggagtg 240  
accggcgaga gcaccggta cgcacatggt gagatcacca ctgcgcgagat ggtgcagctg 300  
cggaggaagt gtgaactctt cacctacatg cgatatgatc tagaaatcac gtttgtgatt 360  
acaagtcgcc aggagcaagg ggccaaactg tcgcagaaca tgccagtatt aacacatcag 420  
atcatgtatg tcccaccggg cgggcctata ccaaccagca acgagagtta cgcttggcaa 480  
acgtcaacga acccaagcgt gttttggaca gaaggaagct cgccaccacg aatgtcaata 540  
  
ccgtttgtta gcataggaaa cgcatacagc aatttctatg atgggtgggtc gcacttctca 600  
caaaacggtg cgtatgggta cacggcacta aacaagatgg gtaggatatt cgtgcgccat 660  
gtaaacaaag agacaccact gcaagtcata agcacaatac ggatgtatat gaagcccaaa 720  
cacgtgcggg cttgggtgcc aagaccacca cgctgtgtc catacctgcg ggcgggtgat 780  
ataaactttg aagtgactga tgttacagaa aaacgaaata acatcaatta tgtcccaacc 840  
ccatcccaca gcagcagtggt gcacatgcgc ttgaacaacc at 882

<210> 46  
<211> 879  
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 46

ggggacgtcg	aagaggcaat	tgatagggca	gttgcgaggg	tggtgacac	aatgccaaacc	60
ggtccacgaa	acactgagag	cgtgcctgcc	ctgacagcag	tagagacagg	ccacacctca	120
caggtcgttc	ctgggtgacac	aatgcagacg	aggcatgtta	agaactatca	cicccaggaca	160
gagtcaccaa	ttgaaaactt	cctgtgcagg	gctgcgtgcg	tgtatataac	aacatacaaa	240
tcagctggtg	gaacacccac	agagcgatat	gcaagttgga	ggataaacac	caggcaaatg	300
gtgcagctca	ggaggaaatt	tgagctcttc	acataacttg	gctttgacat	ggaaatcaca	360
tttgtgatca	caagcacaca	agatcctggg	acacaattgg	cacaagatat	gcctgtacta	420
actcatcagc	tcatgtatat	cccacctggg	ggccctgttc	ctaacagtgc	cacagatttt	480
gcatggcaat	catcaactaa	tccaagtata	ttttggacgg	aaggctgtgc	tccagcacga	540
atgtcgggtg	cgttcatcag	cattggcaat	gcctacacca	atTTTTacga	tgggtgggtcg	600
catttcaccc	aagaaggggt	ttatgggttt	aactcactga	acaacatggg	ccacatatat	660
gtgaggcacg	tcaatgagca	aagcctgggt	gtctcgacca	gcaccgttcg	cgtgtatttt	720
aaacccaaac	atgtgcgtgc	ttgggtacca	agaccacca	gactgtgcc	atacactaag	780
agttcaaatg	tgaatttcaa	accgaccgct	gtcactgatg	agcgaaagga	tatcaacgat	840
gtaggcaccc	ttcgaccaac	agtgtacact	aaccttgtg			879

<210> 47

<211> 843

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 47

ggagacgtgc	aagatgcagt	gacagggtgct	atagtacgtg	tcgctgacac	tctcccaaca	60
ggtccctcaa	ataatgaagc	tatacccaat	ttaacagcag	tgagagactgg	ccataacctcg	120
caagtgcac	caggcgacac	aatgcaaaca	cgccatgtgg	tgaacatgca	caccgcgtct	180
gagtcgtcca	tcgagaattt	cctggcacgt	tcagcatgcg	tgtactacct	tgattaccaa	240
acgggagaa	ggcccggcga	tcagtatttt	ggccagtggg	ccattaccac	gaggagggtt	300
gcgcaattgc	gtcgaaagct	ggagatgttc	acttatctaa	gatttgacat	ggaaatcaca	360
atcgtgatta	ctagttcaca	ggatcaatct	accatctcga	accagatac	accagttttg	420
acgcacaaa	ttatgtatgt	accaccagga	ggaccaatcc	cagcaaaagt	cgatgattac	480
agttggcaaa	catccacgaa	tcccagcgta	ttctggactg	aagggaatgc	gcctgcccgr	540
atatccatcc	cattcattag	cgttggaaat	gcatacagta	gcttttatga	cgggtgggtcg	600
aacttctcac	aaaacggggc	gtatggctac	aataccctca	acaacatggg	acaattgttc	660
tttaggcacg	ttaacaaacc	cagcccta	actgtcaca	gcgtcgccc	catatacttc	720
aagcctaagc	acgtgagagc	ttggatcccc	cgaccaccgc	ggttgtgtcc	atacataaat	780
gcgggagacg	tgaacttcac	tccgacacca	gtgactgaaa	agcgaaagga	cctaataacc	840
acg						843

<210> 48

<211> 843

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 48  
ggagatgtgc aggacgcagt ggctggggcc atagtgcgtg tggctaatac tctcccatca 60  
ggcccctcaa acaatgaggc tatacccaac ttaacagccg tagaaactgg acacacctcg 120  
caggtgacac cgggtgatac aatgcagacg cgccacgtag tgaacatgca cactcgttct 180  
gagtcgtcaa tcgagaactt cctggcgcgg tcagcatgtg tatactacct cgattaccga 240  
acaggaacgg ggcctggcaa tcaatacttt agccagtggg ctattaccac aagacgagtt 300  
gcgcagctgc gtcgaaaatt ggagatgttc acctatctaa ggttcgacat ggagatcacg 360  
attgtaataa cgagttcaca agatcagcct accgtccgaa acccagacac accgggtcttg 420  
acacaccaaa tcatgtatgt gccaccagga gggccaatcc cagcaaaggc cgacgattac 480  
tggtggcaaa catccacaaa ccccagtgtc ttctggactg aagggaacgc accagcccgg 540  
atatccatcc cgttcattcag tgtcgggaat gcatatagta gtttctacga tggatgggtca 600  
aattttctgcg aaaatgggcg gtatggctac aacaccctga acaacatggg gcaattgttt 660  
ttcaggcatg tcaataaacc cagtcccaac actgtcacaa gtgttgcccg catatacttc 720  
aagcccaaac acgtgaaggc atgggtcccg cgaccaccgc gattgtgccc ttacattaat 780  
gctggagatg taaatttcac cccacatcg gtcactgaga agcgagcgag cctgataacc 840  
aca 843

<210> 49

<211> 843

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 49  
ggggacgtgc aagatgccgt gactggagcc atagtgcgtg tcgccgacac actgcacacg 60  
ggaccctcga acaacgaagc aatacccaat ttgacggccg tggaaacagg gcatacatcg 120  
caagtgcacac caggcgatac aatgcagacg cgtcacgtgg tcaacatgca cacccggtca 180  
gagtcaccaa ttgagaactt cctagctcga tctgcgtgtg tgtattacct cgactatcaa 240  
acagggtcag gacctggcac ccaatacttc ggccagtggg ccatctccac aaggagagtt 300  
gcgcaactgc gccggaagtt ggaaatgttc acctacctaa gatttgacat ggaaataaca 360  
atcgtgatca ccagttcgca agatcactcc accatctcaa atccagatac accaatcatg 420  
acgcaccaaa ttatgtacgt accaccaggg ggtccaatcc cggcgaaggc cgacgactat 480  
agctggcaaa catctacaaa ccctagtgtg ttttggacag aagggaacgc acccgcccgc 540  
atatccattc cattcattag tgtcggaaat gcctatagca gcttctacga cgggtgggtca 600  
aattttctgcg aaaacggccg atatggatac aacactttga acaacatggg acaactattc 660  
ttcagacacg tgaataagcc cagccccaac accttcacaa gtgttgcccg tgtatacttc 720  
aagccaaaac acgtgaaggc gtggattcca cgaccaccgc gattatgtcc atacataaat 780  
gcgggagacg tgaatttcaa accaacaccc gtgaccgaaa agagggcgag cttaatcacc 840  
aca 843

<210> 50

<211> 876

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 50  
ggagactcag agcacgcagt ggaaagcgcc gtatctaggg tggcagatac aattatgagt 60  
ggcccgctcaa actcccaaca ggccccgct cttactgcag ttgaaactgg acacacatcg 120  
caagttgttc caagtgcac catccaaacc agacatgtgc agaatttcca ctctaggtcc 180  
gagtcgacca ttgaaaattt cctgagtagg tcagcatgtg tgcatatcgc caattacaac 240

<220>  
<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 51						
aacgacgttc	agaacgcggt	ggaacgggtca	attgttcgtg	tagcggacac	attacccagt	60
gggccaagca	actcagaaag	cataccagca	ctcacagcag	ccgagactgg	acatacctcg	120
caggtcgtcc	ccagcgcac	catccagacg	cgacatgtga	ggaattttca	cgttcgggtct	180
gagtcatcgg	tagagaattt	tcttagcag	tcagcttgcg	tgtacatcgt	ggagtacaaa	240
acccgggaca	cgactcccga	caagatgtat	gatagctgca	ttatcaatac	caaacagaagt	300
ggcgagttga	gaaggaagct	ggagttcttt	acctatgtca	gattcgacgt	ggaagttacc	360
tttgtcataa	ccagcgtgca	agatgactcc	acaaaacgga	acaccgacac	cccagtgcta	420
actcatcaaa	ttatgtatgt	gccgccagga	gggcccatat	cacaagcggg	ggacgattat	480
aactggcaaa	cttcaccaaa	cccagcgtat	ttttggactg	aggggaacgc	gccaccaagg	540
atgtctattc	cgttcatgag	tgttggcaat	gcatacagta	acttctacga	cggggtggccc	600
cactttttctc	aaactggggg	ttacgggttt	aacaccctaa	acaacatggg	taagttatat	660
ttcaggcatg	taaacgcagc	gactattagc	ccaatcaaaa	gtaagggtcag	aatatatattc	720
aaacccaaa	acgtgaagcg	atgggtaccc	agaccgccga	gatttgtgtga	atacaccac	780
aaggataaacg	tggactatga	accaaagggg	gtcacaacat	cacgcacttc	aatcaccatc	840
accaactcca	cacacatgga	gacgcac				867

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<220>
<223> Description of Artificial Sequence; Note =
        synthetic construct
```

20

ttcaggcatg	tgaacggcaa	gacaataagc	cctatcgcaa	gcaagggttag	gattttacttc	720
aaaccaaagc	atgtgaaggc	atgggtgccc	agaccaccgc	gatttgtgtga	atacaccac	780
aaggacaatg	tggattacga	accaaaggga	gtcacaacat	cccgtacatc	tatcacaatt	840
agcaattcca	ctcatatgga	aacatat				867

&lt;210&gt; 53

&lt;211&gt; 867

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 53

aacgacgttc	agaacgcggt	ggaacggtca	attgttcgtg	tagcggacac	attacccagt	60
gggccaagca	actcagaaag	cataccagca	ctcacagcag	ctgagactgg	acatacctcg	120
caggtcgtcc	ccagcgacac	catccagacg	cgacatgtga	agaattttca	cgttcgggtct	180
gagtcacatcg	tagagaat	tcttagcagg	tcagcttgcg	tgtacatcgt	ggagtacaaa	240
acccatgaca	cgactcccga	cgagatgtat	gatagctgga	ttatcaatac	cagacaagt	300
gcgcatgtga	gaaggaaagt	ggagttcttt	acctatgtca	gattcgacgt	ggaagttacc	360
tttgtcataa	ccagcgtgca	agatgactcc	acaagacaga	acaccgacac	cccagtgcta	420
actcatcaaa	ttatgtatgt	gcccgcagga	gggcccatac	cacaagcggg	ggacgattat	480
aactggcaaa	cttccacca	ccccagcgta	ttttggactg	aggggaacgc	gccaccaagg	540
atgtctat	cgttcctgag	tggtggcaat	gcatacagca	acttctacga	cggtgtgtcc	600
cacttttctc	aaactggggg	ttacgggttt	aacaccctaa	acaacatggg	taagttatat	660
ttcaggcatg	taaacgcacag	gactattagc	ccaatcaca	gcaaggctcag	aatatatttc	720
aaacccaaac	acgtgaaggc	atgggtaccc	agaccgccga	gatttgtgtga	gtacaccac	780
aaggataacg	tggactatga	accaaaggga	gtcacaacat	cacgcacttc	aatcaccatc	840
accaactcca	cacacatgga	gacgcac				867

&lt;210&gt; 54

&lt;211&gt; 876

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 54

ggcgacaccg	aaacggctat	tgacaatgca	atcgccaggg	tagcagatac	ggtggcgagc	60
ggtcctagta	attcgaccag	tatcccagca	ctcacagcag	ttgagacagg	tcacacgtca	120
caagtcgagc	ccagcgat	agtgcacaa	agacatgtca	aaaactacca	ctcgcgttct	180
gagtcacaccg	tggaaaactt	tctaagtcgc	tccgcttggtg	tgtacatcga	agagtactac	240
accaaggacc	aagacaatgt	taataggtac	atgtcgtgga	caataaatgc	cagaagaatg	300
gtgcaattga	ggagaaagt	tgagctgttt	acatacatga	gatttgatat	ggaaatcacg	360
tttgtaatca	caagtagaca	actacctggg	actagcatag	cacaagatat	gcccgcactc	420
accaccaga	tcattgtacat	accaccagg	ggcccgggtac	caaacagcgt	aacagatttt	480
gcgtggcgaga	catcaacaaa	ccccagatt	ttctggacag	aaggaaacgc	gccacctcgc	540
atgtctat	cattcatcag	tattggcaat	gcataatagca	acttctatga	cggtgtgtca	600
cacttttccc	aaaacgggtg	gtacggat	aacgcctga	acaacatggg	caagctgtac	660
gcacgtcatg	ttaacaagga	cacaccatac	cagatgtcaa	gcacaatccg	agtgtatttc	720
aaacccaagc	acatccgagt	atgggtccca	cggccgcctc	gactgagccc	gtacatcaaa	780
tcaagtaatg	taaatttta	ccccacgaac	ctgacggacg	agcggtcac	catcacatat	840
gtgcccgcaga	ctatacgtcc	agatgtgcgc	accaac			876

&lt;210&gt; 55

&lt;211&gt; 843

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 55

ggtgatgtcc	agaatgcagt	tgaggggggca	atgggttagag	ttgcagatac	cgtgagcact	60
agcgccacca	actccgaaca	agtgccgaac	ctgaccgcgg	tgagagaccg	tcacacatcg	120
caggtagtgc	ccggcgacac	tatgcagacc	aggcacgtag	tgaacaagca	tylycggatct	180
gaatctacaa	ttgaaaattt	cctcgcacgt	tcagcctgtg	tgtactttct	tgagtacaag	240
actggtacca	agactgactc	caacgccttc	agcaattggg	tcatacacaac	gcgcaagggt	300
gcgcagctga	ggcgcaagtt	ggagatgttt	acatacttaa	ggtttgatat	ggagattact	360
gtgggtcatta	ctagctccca	agaccagtc	acatacacia	atcaaaatgc	gcccgtcctg	420
actcaccaga	ttatgtatgt	accacctgg	ggcccagtc	ccactagcgt	tgatgattat	480
tgctggcaaaa	catccacaaa	cccaagcata	ttttggacgg	aaggaaacgc	acctgccaga	540
atgtccatcc	cctttatcag	cattggaaat	gcttatagca	acttttatga	tgggtgggtca	600
cattttctcac	agaacggagt	ctatggtttt	accaccttaa	acaacatggg	ccagctgttt	660
tttaggcatg	ttaacaagcc	taaccggcg	acaataacca	gtgtggcccc	catttacttc	720
aagccaaaac	atgtgagggc	ctgggtgcct	agaccgccac	ggttgtgccc	ttacatcaac	780
agtagcaacg	tgaacttcga	cccaaaacct	gtggcagagg	tcaggtctag	catcatcacc	840
acc						843

&lt;210&gt; 56

&lt;211&gt; 876

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 56

ggtgatgtgg	ttgaagccat	tgagggcgca	gttgctagag	tagcagacac	tatcagcagc	60
ggcccaacaa	attctcaagc	agtcccagca	ctcacagcgg	tgagagactgg	acacacctcg	120
caagttgtac	caggtgatac	catgcagacc	agacacgtaa	agaattacca	ctcacgatca	180
gaatcgacca	ttgaaaattt	tctgagtagg	gcggcttggtg	tctacatggg	tgagtattac	240
actacaaata	cagatgagac	caagagattt	gctaattgga	caatcagcgc	aaggcgcatg	300
gtacaaatga	ggaggaagct	tgaaatgttc	acgtacgtcc	gtttcgacgt	ggaggtgaca	360
ttcgtaatta	ccagcaaaca	ggaccaaggg	aatcggttgg	gacaagatat	gccccgcctc	420
acacaccaga	taatgtacat	cccgccaggt	ggtcgtatac	ccaaatccac	cacagattac	480
gcatggcaaaa	cgtcgacaaa	ccccagcatc	ttttggacgg	agggtaacgc	gccccccagg	540
atgtccattc	ctttcatgag	cattggaaac	gcataatagca	atttttatga	cggttggtct	600
cactttctctc	aaaatggcgt	gtacggatat	aacacactaa	accacatggg	tcaattatac	660
atgcgccatg	taaatggacg	atcacctctt	ccaatgacca	gcacggtgag	ggtgtacttc	720
aaacccaaaac	atgtgaaaac	atgggtgcca	cgacccccaa	gattgtgcca	atacaaaaac	780
gcctcgacag	taaacttttc	accacaaaac	atcacagaca	agagggatag	catcacttac	840
attccagaca	ccgtgaaacc	cgacatgaca	acatat			876

&lt;210&gt; 57

&lt;211&gt; 861

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 57

ggggatgaga	gtgcaaaggc	tacagtttcc	aacacacagc	ctagcgggcc	aagtaattct	60
gtcagcgtgc	caatgcttac	tgctgctgag	accgggcaca	catctcaagc	agtaccagc	120
gacactatac	agaccaggtg	cgtagtgaac	caacacaagc	ggcgggaatc	atccgtggaa	180
aatttctgt	gtcgtccgc	ttgcttatac	tacacaacct	atgacactca	cggggatgca	240
gccgacgcaa	agtacgccag	ttggacgata	accacccgaa	aagctgcaca	gctgcggaga	300
aaactagaga	tgttcacata	cttgagggtt	gatttagaag	tgacattcgt	tataacaagt	360
gcacaagtaa	catctacca	taaacgtcag	gacacgcctg	ttctcacgca	tcaagtcattg	420
tacgtgccac	caggtgggtg	agtacccgct	agtgtggacg	attatgcgtg	gcagacgtcc	480
acaaacccaa	gtatcttctg	gacggaagg	aatgcaccag	cacgcatgtc	tatacccttt	540
atcagcgtgg	gcaacgcata	cagtagcttc	tatgatgggt	ggtccaactt	tacacagaai	600
ggagtttacg	ggttcaaac	gctaaacaac	atgggaaagc	tatacgtacg	acacgtcaat	660
ggagctagcg	ccggccctgt	gaagagtacc	atacgggttt	acatgaagcc	caaacacgtg	720
aaggcttgga	taccagacc	tcctcgctc	tgcgagtacg	aaaaatcagg	caatgtaa	780
ttcaaacc	agggcgtgac	agagagccgg	acgtctatca	aattagaaaa	accaaaccct	840
gcgtccaaat	taatgaacca	c				861

&lt;210&gt; 58

&lt;211&gt; 894

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 58

aatgatccag	agcaagctat	aaatcgggcg	ctagcgaggg	tggcagacac	agttcgtagt	60
gggccgtcta	actctgaaca	aattcccgca	ctgacagccg	tggagacagg	gcatacatca	120
caagtcgtcc	ccagtgacac	aatgcaaacc	cggcatgtga	agaattacca	ctccaggtca	180
gagtcaacaa	tagagaactt	tttgtgtaga	tcggcttgcg	tgcacatcgc	aacatacaag	240
gctaaaggcg	gagctggaga	cgtcgaccgg	tacgacagct	gggacataaa	cataaaagag	300
ctggtacagt	tgcgacgcaa	gtgcgagatg	tttacgtacc	taagggttga	tatggagggtc	360
acctttgtga	ttaccagcat	acaggagcag	ggcaaagcac	tgaccagga	catgccgggtg	420
ctaacgcacc	aaataatgta	cgttccaccg	ggcggtgccg	tgcttagtgg	tgcagaaagc	480
tttgcgtggc	agtcattcaac	gaatcccgag	gtgttctgga	cagaaggcaa	tgcaccagca	540
cgtatgtcta	taccctttat	aagtattggg	aacgcttaca	gtaatttcta	tgatgggtgg	600
tcccacttta	cccagaacgg	tggttacggg	tacaacacac	taaacaact	gggtaagatc	660
tacgtcaggc	atgtgaacaa	acaaaccccc	acggatgtca	ccagcaccgt	gcgaattttac	720
ttcaagccca	aacacgtgcg	agcttggtg	cctcgcccg	ctagactatg	tccttataag	780
aacaaggcaa	atgtaaactt	tgaagttact	agtgtaacca	ctgccagaac	gagtcctta	840
gatgtcccca	ctcccaacca	cagtagtagc	gtgcacctgc	gcatgcacac	gcac	894

&lt;210&gt; 59

&lt;211&gt; 882

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 59

ggtgatgacc	aacacaagac	caatacagtg	acagacacag	agcagagtgg	cccgtcaa	60
tccgaacgcg	tccagccct	cacagcagtg	gagactggcc	acacttcgca	ggtcgtaccc	120
agcgacacag	tgcaaacctg	ccacgtacgc	aattaccact	caaggacaga	gtctacctta	180
gagaattttc	ttggtaggtc	agcatgtgtg	cacatcgaca	catacaaggc	taagggtgaa	240
aaaggatctt	ctgagaggta	cgcgtcatgg	gagataacta	acaggagat	ggtgcaattg	300

cgccgaaaat	gtgagatggt	cacatatatg	aggtatgacg	tggaaataac	atttgtgata	360
accagctacc	aggagcaggg	cacacgattg	gcccaggaca	tgcctgtact	aacacaccaa	420
atcatgtacg	tgcccccggt	tgggcctgtg	ccaacaagca	cggagagcta	tgcattggcag	480
acctcaacga	accctagcgt	cttttggact	gagggcaacg	caccaccgcg	tatttccata	540
cccttcatca	gcataggaaa	tgcgtactgc	aacttttatg	atgggtggtc	acattttctca	600
caagatgggt	cctatggcta	cacagcgctc	aatagaatgg	ggaaaatata	tattagacat	660
gtaataaagg	agacccccac	acaggtcatt	agtaccgtga	ggatgtacat	gaaacaaaaa	720
cacattcgcg	catgggtgcc	cagaccccc	cggctgtgca	aatacctaca	ctcaggcaac	780
atgaacttca	acgtggagga	cattacagag	gagcggaacg	atataaacca	tgtaccacc	840
cccagccaca	gcagtagtgt	gcgtgtgcgt	cttggcacca	ca		882

&lt;210&gt; 60

&lt;211&gt; 867

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 60

ggtgatgttg	aggactcagt	aaacagagca	gtggttaggg	tagcagacac	catgccaaagt	60
ggaccatcca	attcgcaggg	agtacctgcc	ttgacagccg	ctgagacagg	tcacacgtct	120
caagtgggtg	ctgggtgata	catccaaaca	cgatcatgtg	acaactacca	ctccagaact	180
gaatccagta	tcgaaaattt	cttcgggcgt	tccgcatgtg	tagtgggtcaa	aacatataaa	240
atgggtcaaa	aagttgtagc	tacagacaga	tatgatagtt	ggatgatttc	cattagggac	300
atggtacaac	taagacggaa	gtgtgaaatg	ttcacgtaca	tgagatttga	tttagagatc	360
accttcgtgg	tcacgagtta	ccaacaatat	agtacatcct	tgacacagga	catgccagtg	420
atcacgcctc	agttcatgta	tgtgccgcct	gggggtccgg	ttcctgagag	tgtaaatagc	480
tacgcttggc	aaacgtcaac	caatcccagt	atattctgga	ctgagggtaa	tgccccagca	540
aggatgtcca	ttcccttcat	cagtgttggg	aacgcatata	gctgcttcta	cgatggctgg	600
tcacacttca	cacagaaggg	ggtttatggg	tataacactc	tcaacaacat	gggcaaattg	660
tacatgcgac	acgtgaacaa	aaatagcccc	acagagatca	taagcactct	tcgtgtgtat	720
ttcaagccaa	agcacgtgaa	agcgtgggta	cccagaccac	ccaggctatg	tccatacaaa	780
tataaggcaa	atgttgactt	tgaagtgact	ccaatcacag	acaagcgaga	ctccataacc	840
agcataccag	tccccaagca	cactcat				867

&lt;210&gt; 61

&lt;211&gt; 861

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 61

ggggataaac	aggatcggac	ggtcgccaac	acacagccta	gcgggtccgtc	caactccacg	60
gaaattccag	ccttaacagc	ggtggaaaacg	gggcacacct	cacaagtgga	tcccagtgac	120
actatccaga	ccaggcacgt	ggtaaaccttc	cactcacgtt	ctgagtccac	tatagaaaat	180
ttcatggggc	gtgcagcatg	tgtgttcatg	gatcagtata	aaatcaatgg	agaagagacg	240
tccactgata	ggttcgcagt	gtggaccata	aacataaggg	agatggccca	attaagaagg	300
aagtgtgaaa	tgttcacgta	catgcgtttt	gatatcgaga	tgacaatggt	cattaccagc	360
tgtcaagacc	agggaaacgat	actagatcag	gacatgcctg	ttttgacgca	tcaaattatg	420
tacgtcccac	cagggggccc	aatcccagcc	aaagttagata	gttacgagtg	gcagacatca	480
acaaacccca	cggtcttctg	gacggaaggt	aatgcaccac	cgcgtatgtc	tattccattc	540
attagcgtcg	gcaatgctta	tagctcattt	tacgatgggt	ggtcacactt	cacacaggac	600
ggtacctatg	ggtatacaac	ccttaatgca	atggggaaac	tgtacattag	gcatgtgaat	660
aggagcagcc	ctcatcagat	aaccagcacg	atcagagtat	acttcaaacc	caaacacatc	720

aaggcatggg	tgccccgacc	accacgattg	tgccccgtata	taaacaaaag	ggacgtaaac	780
tttgtagtca	cggagataac	agactcaagg	acttccatca	ctgatacacc	acacccagaa	840
catagtgtcc	tggcaacgca	t				861

<210> 62  
 <211> 879  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence; Note =  
 synthetic construct

<400> 62						
ggagacatcg	tggaggctgt	ggagggagcc	atctcgcgag	tggcagatac	tgtagtagt	60
gggcccagta	actctcaagc	agtaccagcc	ctcacagcag	tcgaaacggg	tcacacttct	120
caagtcaatc	ctagtgcac	catgcagacc	agacacgtga	caaattacca	ctcgcgggtca	180
gaatccagca	tagaaaattt	ccttagccgc	tctgcttggt	tgtatatggg	cgaatacagc	240
acacaagcat	cagatgagac	caaaaagtac	atgtcatgga	ccataagccc	aaggaggatg	300
gttcaaatgc	gcaggaagtt	tgagctcttc	acttacctgc	gttttgatgt	ggagattact	360
tttghtaatca	ccagcagaca	agtcaaggta	gggacacaat	taggccaaga	tgcccccccg	420
ctaactcacc	aagtcatgta	tataccccca	ggaggcccag	tacctgattc	agttgggtgat	480
tacgcatggc	agacttccac	taaccctagt	atcttttgga	ccgaaggtaa	tgcatacccc	540
aggatgtcaa	tacccttcat	tagcataggt	aacgcctata	gcaactttta	tgacgggtgg	600
tcgcattttc	accagaatgg	cgtctatgga	tacaacacgc	tgaaccatat	ggggcaactg	660
tacgtgcggc	atgttaacgg	cccttcacca	ttaccagtga	caagcacagt	caggggtctac	720
tttaaaccga	aacacgtgaa	ggcttggtga	ccgagggcac	ccaggctatg	tcaatatgta	780
aatgcatcca	ctgtgaactt	cgagccaaca	gacatcactg	agtcacgcac	tgacatcaac	840
catgttccag	acaccgtgaa	gccagatctc	caaacatac			879

<210> 63  
 <211> 843  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence; Note =  
 synthetic construct

<400> 63						
ggggacgtgc	acgatgcggt	ggttgggggc	atgaccctg	ttgcagacac	gataagtagt	60
gggccaagca	attcagaaag	cgtgccagca	ttgactgcag	ccgagacagg	acacacatca	120
caggtagtac	cgagtgcac	catgcagacc	agacatgtgc	ggaatttcca	cacaagatca	180
gagtcctcaa	tagaaaattt	catgagtcgc	tccgcctgtg	tctactatac	taagtataag	240
accaaagacc	cggacccaac	ggagatgtac	tctagtgtga	aggttaccac	caggcaagtg	300
gcacaactca	ggaggaagat	ggagatgttc	acttatttgc	gctttgacgt	agaagtgcac	360
tttghtaataa	ctagctcgca	agatcagtc	acgagtgttg	cacaggacgc	acctgttctc	420
actcaccaaa	tcatgtacat	cccacccgga	ggcccgggtc	ccaaatcagg	tagggattac	480
tcatggcaat	cctgtactaa	cccaagtgtt	ttctggactg	agggtaatgc	accaccacgc	540
atgtgtattc	cgttcattag	tattggaggg	gcatatagtt	cattctatga	cgggtgggtcc	600
cactttaacc	aacaaggtcc	gtacgggtat	aacactctca	atgacatggg	tcaactgtat	660
tttaggcgatg	tgaacgaggg	tagcccaggg	gcggttaaaa	gctacatcag	aatatacttc	720
aaacctaacc	atattagagc	atgggtgccc	agaccaccta	gattgtgtca	gtatgagaaa	780
caagggagcg	ttgacttcaa	ggtgcagggg	gtaactgatg	ctcgtacctc	gctcaccact	840
aca						843

<210> 64  
 <211> 885  
 <212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 64

aatgaccag	cacaagccgt	gttgagtgcg	atcggtcgtg	tcgctgacac	cgtcgctagc	60
gggccatcga	attcagagag	agttccagtt	ctaaccgctg	cggagacagg	tcataacctca	120
caggtgggtc	ccagcgatac	cattcagacg	cgccacgtcg	tcaacttcca	cacaagatcg	180
gagtcaacaa	ttgaaaattt	tatgtgtcgc	tcgcgctgcg	tglaacatcg	ccgggtacgg	240
actgaaaagc	aaggggaaca	aatatccaga	tacaccaagt	ggaagatcac	cactaggcag	300
gtggcgcaac	tgcgaggaa	gatggagatg	ttcacataca	tgcgatttga	tttggaaatg	360
acatttgtaa	tcacaagctc	ccagcgatg	tcaacggcat	atgattcaga	cacaccagcc	420
ctcaccacc	aaataatgta	cgtgccacct	gggggcccgg	agccccgtca	ttatgaggat	480
ttcgctggc	agacatccac	aaatccaagc	atattttgga	ccgaaggtaa	cgcaccacca	540
cgcttatcaa	tcccatttat	gagtgtggga	aatgcctatt	gcaattttta	tgatgggtgg	600
tctcactttt	cacaaagtgg	agtgtatggg	tttaccacct	taaataacat	gggacaactg	660
ttcatgcgcc	atgtcaataa	gtcaacagcg	caccccatcg	atagtgtggt	gcgagtttat	720
tttaaaccac	agcatgttaa	ggcgtgggtg	ccaagacctc	cccggttgtg	cccatacatc	780
tatgcaagga	acgtggattt	tgagccacaa	ggtgtcactg	aatcaagaga	aaagataaca	840
ctagataggg	atactcacac	ccctatgcgc	acatgcgggc	cgttc		885

<210> 65

<211> 882

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 65

ggagatgtct	gtgaggaagt	agagagggct	attgtcaggg	ttgcagatac	tgtcgggacgc	60
ggtcctgcta	acactgagag	tgtaccagcg	ctgactgcag	ttgaaactgg	acacacttca	120
caagttgtac	ccggggacac	catgcaaacc	agacatgtta	aaaactttca	cacgcgggtca	180
gaatcatctg	tggaaaattt	catgtgcaga	gcagcgtgtg	tgtattatgt	ggattaccac	240
acacaaaatg	acagtgagga	tgaaaaatat	gcactcttga	ttatcaaacac	gagacaggta	300
gcacagctac	gcaggaaaat	tgagctgttc	acatacacta	ggtttgatgt	cgaaatcaca	360
ttcgtgatca	ccaccacaca	gcagcaatcc	acagctccca	accccgacac	tcctctgctg	420
acacacaaa	tcatgtatgt	gcccccggtg	ggcccagtg	caaatagtgc	taccgattat	480
tgttggcaat	catccacaaa	tcccagtata	ttctggaccg	agggtagcgc	accacccaaa	540
atgtcaatac	cctttataag	tgtgggaaat	gcatacagca	gtttttatga	tgggtgggtca	600
catttctact	aaaacggggg	gtacgggttc	aacactctga	acaatatggg	caaattatac	660
ttcaggcacg	taaatgacaa	caccgtaggg	ccatatgtga	gcaaagcccg	catttatttc	720
aaaccaaagc	atgtgcgtgc	gtgggttccc	aaacctccca	ggctctgtga	atacaacaat	780
cgagccaacg	tgaactttga	accacgaggg	gttaccgatg	ccagggtctag	tatcacggcc	840
acaaccgaca	cgatcactga	gagcacaggg	atgcaaacga	ct		882

<210> 66

<211> 876

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

```

<400> 66
aatgatccag caactgccat agttagatcg gttgagagag tggctgatac catagcaagt      60
ggaccacctc actcagagag agtgccagca ctaaccgccg ttgaaacagg tcacacctca      120
caggtagtcc cgagcgacac catgcaaact aggcatgttg tgaaccatca cattagatca      180
gagtcctcta ttgaaaactt cctgagcagg tccgcctgcg tgtacatcga catgtatggg      240
acaaaagaga atggtgacat caagcgcttc accaactgga gaataaacac acgtcaggtc      300
gtgcagctaa ggcgcaagct ggaaatgttt acatacatta gatttgatgt tgaaatcact      360
tttgtaatca ctagcacaca gggaacaccg actcaaaaga acaaggatac cccagttctt      420
acacaccaaa tcatgtatgt gccaccaggg ggcccaatcc ctgtatctta tgaagattat      480
tcttggcaga cctctacaaa tcctagtgtt ttctggacag aagggaatgc cccagcccgt      540
atgtcaattc ccttcattgag cgtagggaac gcctattgta acttttacga cgggtgggtca      600
cacttctcac aatcgggtgt gtatgggttc actacactca ataacatggg tcagttgtac      660
tttcgacacg tgaacaagga cacccttggg ccatacaata gcacggttcg ggtttacttc      720
aaacccaaac atgtgaaggc atgggtaccc agaccaccgc gcctgtgcga ctacgtttac      780
gcacataatg ttgacttcac accaaaaggg gttactgaca gcagggacaa gatcacctg      840
gaccgtgatg aacacgtgcc gtcagtgggt aaccac                                     876

```

<210> 67

<211> 870

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

```

<400> 67
ggagatgata caccgcattc gatctcaaac acggttgcaa acaccaaccc tagtgggtcca      60
accaactcag aaaggatccc agcgctcaca gcagcggaaa ctggtcacac ctgcgagggtg      120
gtcccgagtg ataccgtaca aactcgttgt gtgaaaaact tccacactcg atcggagtca      180
tcaattgaga actttttgtg cagatcagct tgcgcacaca tgatcatcga tgaggccttc      240
ccaacaacaa cacaagacgg tacacaaagg ttgcgcaatt ggacgattag tgtgaaagac      300
atggtgcagt tgaggaggaa atgtgagatg ttcacgtact taagatttga catggagggtg      360
acttttgtga taactagtgt gatcgaaaact aaaaaggga aagtaccggc accagcagtc      420
acacaccaag taatgtacat tccaccaggc ggacctattc cagctagcgt tgaaagttat      480
gcctggcaaa catccacca ccaagcgtg ttttggacag aagggaatgc tccccacgc      540
atgtctatac catttatcgg cattggtaat gcctacagca tgttctatga cggatgggccc      600
agtttcagac aatcgggtgg atatggatac agcacctga accacatggg ccagatattc      660
gtaagacacg tgaatgcaac cataccaaac ttgatcagca cagtcaggat atatttcaag      720
ccaagcacg ttagggcttg gattcctaga cgcgccaggg tgtgtcagta catttacaag      780
gcaaattgtg actacgcagt gtcaaatact actgaaaagc gagatagtat aagatggaca      840
ccaacaaccg gtccgtcaat gacatcccac                                     870

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<210> 68

<211> 855

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

```

<400> 68
ggtgacgacg caaggactgt tagcgacaca caaaagagcc agccatctaa ctctgagcaa      60
gtgcctgcct taacagcggg tgagactgga cacacctctc aagttgagcc cagtataca      120
gtacagacac gacatgttgt caactcacac agtaggacag agtcgacaat tgagaatttc      180
tttgggaggg ctgcgtgtgt gagggtgaga gactactcta tagggcatga tttggcagcg      240
gacgaaacat atgatagctg ggccattaca gtgcgagaca tgggtgcagct tcgtaggaag      300

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tgtgagatgt	tcacatacat	gaggtttgac	ttggaagtga	cgctagtcac	caccagctat	360
caagaaccag	ggacaatcac	cacccaggat	atgcccgtcc	taaccacca	gattatgtat	420
gtgccgccag	gaggcccggg	cccagccaag	gctgacagtt	acgcgtggca	aacgtcaaca	480
aatcccagta	tattctggac	cgaaggcaac	gctccacctc	ggatgtctat	cccatacatt	540
ggcatcggca	atgcatatag	cagcttttat	gacgggtggg	cgagcttcaa	caactcgggt	600
gtgtatggct	acacaaccct	gaataacatg	ggtaaactgt	acttcagaca	cgtgaacaaa	660
cacagcccaa	acactattaa	gagcactgtg	aggatatatt	tcaagcccaa	gcacgtccag	720
gcgtgggtcc	caagaccacc	gcgtttgtgc	ccgtatctga	ataagaggga	tgtcaacttt	780
gaagtgcac	ccgttacgag	caagagagac	agtattaact	gggtgccaca	aacaaaccgc	840
caagtgtaca	atcat					855

&lt;210&gt; 69

&lt;211&gt; 876

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 69

aatgaaccta	gtagtgccat	tgagagagca	attgtgcgcg	tagcagatac	tatggccagt	60
gggcctgcaa	actcagagca	aatccctgcc	ctaaccgctg	ctgagactgg	tcacacctcg	120
caagtgggtc	ccagcgacac	tatgcaaacc	cgccatgtat	gtaactacca	caccagatct	180
gaatcatcga	tcgagaactt	cctatgcagg	gctgcatgtg	tctacatagt	gagttacaaa	240
acacagggcg	acgaacaaac	cgacaaatac	gctagttagg	agatcaacac	gcggcagggtg	300
gcacagttaa	ggagaaaatt	ggaattcttt	acttacataa	gatttgacat	ggaggtaaca	360
tttgtgatca	ctggttcaca	agacaccagc	acacagacta	acacggatac	gccagtgtca	420
acccatcaaa	ttatgtatgt	gcctcccggg	ggtccagtac	cgacatcagc	cacagattac	480
agctggcaga	catctacaaa	tcccagtggt	ttctggacag	aagggaatgc	gcctcccgtg	540
atgtccatac	ccttcattgag	cataggcaat	gcgtatgcta	atctctatga	tgggtgggtcg	600
cacttttagcc	agtcaggggt	gtatggttac	accacactca	ataatatggg	taccctgtat	660
ttcaggcacg	tgaacaactc	gaccatcggt	ccttacacca	gtgcagttag	gatataatttc	720
aagccaaagc	acgtcaaagc	gtgggtgcc	cgaccgccac	ggttggtgcga	ttacaaacac	780
aaaaagaacg	tagactttac	tcccacaggt	gtgaccacaa	ctagagacaa	gataaccttg	840
gacaagggga	ctcacgtgcc	gagcgtatgg	aacaca			876

&lt;210&gt; 70

&lt;211&gt; 876

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 70

aatgaccccg	aagggtgcact	taataaaagca	gtgggcaggg	tagctgatac	tatagctagt	60
gggcccgtca	atacagagca	aattcctgca	ttgacagcag	tggagacagg	gcatacatct	120
caagtgggtac	ctagtgcac	aatgcaaacc	cgacacgtgg	tcaacttcca	tactagatca	180
gagtcacgtg	tacagaactt	catggggaga	gcggcatgtg	tatatatcgc	ccactatgcc	240
acagaaaagg	ctaattgatga	tttggacaga	tacactaact	gggagatcac	aactaggcag	300
gtggcacagt	tgaggcgcaa	ggttgagatg	tttacgtata	tgagatttga	cctcgagatt	360
acattcgtaa	tcaccagctc	ccagcgtact	tccaacaggt	atgcgtcaga	ctcccccca	420
ttaacacatc	aaataatgta	cgtgccgcgg	gggggtccaa	ttcccaaggg	ttatgaagac	480
tttgccctggc	agacgtccac	caacccaagt	gtgttttggg	ccgaaggtaa	cgccctcctc	540
aggatgtcaa	taccattcat	gagcgttggc	aacgcataat	gtaactttta	tgatggatgg	600
tcccatttca	gtcagagcgg	tgtgtacggg	tacactacat	tgaacaacat	ggggcgctta	660
tatttttagac	atgtaaacaa	atcaacagga	taccagtaa	atagtgtcgc	ccgcgtctat	720

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ttcaagccca agcatgtgaa ggcattgggta cctcgcgcg caccgcttatg tccatatttg 780
tatgctaaaa atgtcaactt tgatgtgcaa ggcgtgaccg agtcccgggg taagatcact 840
ctcgaccgtt cgactcacia ccccggtgta accact 876

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<210> 71
<211> 876
<212> DNA
<213> Artificial Sequence

```

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<220>
<223> Description of Artificial Sequence; Note =
        synthetic construct

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<400> 71
aatgaccctg aaggtgcgct caacaaggcg gtgggcagag tggctgatac aatagccagt 60
gggcccgtca acactgagca aattcccgcg ttgacagcag tggaaacagg gcacacatct 120
caagtagtac ctagtgatac aatgcaaact cgacacgtgg tcaacttcca caccagatca 180
gaatcatcgt tggagaactt catgggaaga gcagcgtgtg tgtatatcgc tcattatgct 240
acagagaagg ctaatgatga tttagacaga tacaccaact gggagggtcac aaccaggcag 300
gtagcacagt tgaggcgtaa actggagatg ttcacgtaca tgagggttga cctcgagatc 360
acatttgtaa tcaccagctc ccagcgact tcaaccaagt atgcgtcaga tcccccccca 420
ctaacacacc agataatgta tgtaccgccc gggggcccga tccccagggt ttatgaagat 480
tttgccctggc agacgtccac caacccaagt gtatttttga cggaaggtaa cccccccct 540
aggatgtcga taccattcat gagcgttggg aacgcatact gcaactttta cgacggatgg 600
tcccatttca gccagagcgg tgtgtacggg tacactacat tgaacaacat ggggcacttg 660
tatttcagac atgtaaacaa atcaactgca taccaggtta acagtgttgc ccgcgtctac 720
ttcaagccca agcacgtaaa ggcttgggtg cctcgcgcg caccgcttatg tccatatttg 780
tatgcaaaaa atgtcaattt tgatgtacaa ggtgtgaccg agtctcgggg aaaaatcact 840
cttgatcgat cgactcacia cccgtgtgta accacg 876

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```

<210> 72
<211> 877
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence; Note =
        synthetic construct

```

```

<400> 72
aacgaccccg aacatgcgtt aaacaacgcc attggtagag tggcagatac gatcgccagt 60
gggcccgtga actcggaacg catacctgca ctaaccgcag tggagacagg acacacgtct 120
caagtgggtg caagcgacac catgcaaaca aggcacgtag tcaacatgca tacaagatcc 180
gaatccacca tcgaaaattt catgggaagg gctgcttgtg tatacattgc gcaatacgcc 240
actgataagg ccagtgatga tctggacagg tacaccagct gggagatcac tacgagacag 300
gttgcgcaat tgaggagaaa gctggagctg tttacataca tgaggatatga cttagaagtt 360
acctttgtca ttaccagttc ccagcgact tgcactacat atgcatacga ctccccgcc 420
ttgaccaccc aaattatgta tgtgcctccc gggggcccta tccccatagg acacgaagac 480
ttcgccctggc agacttcaac aaaccccagt gtcttttga ctgaaggaaa tgccccacca 540
cgtatgtcca taccattcat gagtgtgggc aatgcctact gcaattttta cgatgggtgg 600
tcacatttta accagagtgg ggtgtatgga tacactacac taaacaacat gggtcgctta 660
tatttcaggc atgtaaacag atctactgcc taccaggtta atagtgttgc acgtgtttac 720
tttaaaccca aacacgtcaa agcctgggtc ccacgagcac cagattgtg cccatacttg 780
tatgctaaga acgtgaactt taatgtgcaa ggtgtgactg actcccgaga caagataacc 840
gtagaccgaa ccaaccatgt acgtatgcgc accacag 877

```

```

<210> 73
<211> 876
<212> DNA

```

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 73

aacgacccccg	aacacgtggt	aaacaatgcc	gttggcagag	tggcagatac	aatcgccagc	60
gggcccgtga	actcggaacg	cgtacctgca	ctaactgcag	tggagacagg	gcatacgtct	120
caagtgggtgc	caagcgatac	tatgcaaaca	agacacgtag	tcaacatgca	cacaagatct	180
gaatccacta	tcgaaaattt	catgggaagg	gctgcttgty	latacatcgc	acaatacgct	240
actgacaaaag	ccagtgaacg	tttggatagg	tacaccagct	gggaaatcac	cacgagacag	300
gttgcgcaat	tgaggagaaa	gttggaaatg	ttcacataca	tgaggtatga	cctggaagtc	360
acctttgtta	tcaccagttc	ccagcgcacc	tcgactacat	atgcatcaga	ttccccacca	420
ttgactcatc	agatcatgta	cgtgcctccc	gggggcccc	ttcctatagg	atacgaggac	480
ttcgctggc	aaacatcgac	taaccctagt	gtcttttgga	ctgaaggaaa	tgccccacca	540
cgcattgtcca	ttccatttat	gagtgtgggc	aatgcctact	gcaattttta	cgatgggtgg	600
tcacacttta	gccagagtgg	ggtgtacgga	tacactacac	taaataatat	gggtcgtctg	660
tattttcaggc	atgtaaacaa	atctactgcg	taccgggtta	atagtgttgc	acgtattttac	720
ttcaaacc	aaacatgttaa	agcctgggtc	ccgcgagcac	cacgactgtg	cccatatttg	780
tatgcaagga	acgtgaactt	taatgtgcaa	ggtgtgactg	actcccgaga	aaagataacc	840
atagaccgaa	ccaaccatgt	gcccattgct	aacaca			876

<210> 74

<211> 876

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 74

ggggacacgg	aacatgcagt	tgagtcagct	atctccaggg	tagcagatac	cattagctca	60
ggtcctagta	acactgtttg	tataccagcg	ctcaccgcgg	cagaaacggg	ccacacatcg	120
caagtcaccc	ccagcgacaa	tcttcagacg	cgccatgtta	agaactatca	ctcccgtctt	180
gagtcacta	ttgaaaactt	cctgtgtaaa	tccgcgtgtg	tgcatatttg	gtcatacaac	240
gcatacgggtg	atgttggatc	agacagtaga	tatgatagtt	gggagatcaa	catcaggggaa	300
atggtgcagt	taaggaggaa	gtgcgaaatg	ttcacctatc	tcagatttga	catggagggtg	360
acatttgtca	tcactagcaa	gcaagatcaa	gggacttcgc	tatcacaaga	catgccagtg	420
ctaacacatc	agatcatgta	cgtgccgcca	ggcggatccg	tgcccactag	cgtccagagc	480
tacgcatggc	aaacatccac	caacccgagc	gtgttttgga	cagagggcaa	tgcccctgct	540
agaatgtcca	tcccattcat	tagcataggg	aatgcataca	gcagcttcta	cgacgggtgg	600
tcacatttca	cccaacaagg	tggctatggc	tataatacac	tgaacaagat	gggtaagttg	660
tttgtaaggc	atgtgaataa	agaaacacca	acccatgtga	cgagcacgat	acgtgtatat	720
tttaaacc	agcatgttag	agcgtgggtg	ccaaggccac	ctagattgtg	cccgtacatc	780
aataaagcgg	actgtaactt	cgctgttaca	ccactcacca	aacagcgggt	aggaatcaac	840
gatgtccgcg	ggcccagcca	cacattacat	actcat			876

<210> 75

<211> 875

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 75

aacgacccccg	caaccgctat	tgaaggagca	gtccggcgag	tggcggacac	gatccagagc	60
ggaccgagca	attcggagcg	ggttccagcg	ttaacggccg	ttgagacagg	tcacacagca	120
caggttaccc	cgagtgtac	aatgcaaact	agacatgtac	acaacttcca	caccagatcg	180
gagtctagca	tcgagaactt	cctcagtaga	gcagcttggt	tgtacatagg	gaaatatagt	240
agcaatgcaa	caacacaaga	tgaacaatac	atgtcatgga	caattaatac	cagacagatg	300
gtgcagctga	gacgcaaatt	cgaaatgttc	acctacctac	gcttcgacgt	agaagtcact	360
tttataataa	catcgcacca	agatcaaggg	acacagttca	accaggatgc	gcccgtaatg	420
tgccaccaa	tcattgtatgt	gccacctggg	ggcccgggtg	ctaagagtgt	tgatgacttc	480
acatggcaaa	cctctactaa	ccctagtgtc	ttttgggtcag	aaggcaatgc	accaccgaga	540
atgaccattc	cattcattag	tataggggaac	gcctacagca	gcttttatga	tggctgggtca	600
cacttctctc	aaaatggggg	ttacgyyili	aatgcactca	ataacatggg	taaactgtat	660
gtgagacaag	tgaacctaaa	agcccctatg	ccagtcagca	gtacagttag	gatctatttc	720
aaacccaagc	atatcaaagc	ttgggtaccc	agaccaccgc	gtctatgtaa	gtacctgaag	780
tctgggagtg	tcaattttga	gcccactgat	ttgacagaaa	aacggaaatc	cagaaagtac	840
atccccaaaa	ctttcagacc	agatgtgaga	accat			875

&lt;210&gt; 76

&lt;211&gt; 843

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 76

ggtgatgtgc	atgatgcagt	tgtgggtgcg	atgtcgcgcg	tcgctgatac	agtagcaagt	60
ggccctgcaa	actctgagag	cgtgcctgct	ctcactgcgg	tagaaactgg	acacacgtca	120
caggtgacac	caagtgtatc	aatgcagacc	agacacgtac	acaacttcca	cacacgggtcc	180
gaatcgtcaa	tcgagaactt	cttaagccgc	tctgcatgtg	tctattatgc	aacgtacaaa	240
acaacagcca	gcagaccgga	agaccaatcc	gttaggtggt	ccatttcata	ccgccagggtg	300
gcccactgca	gcaggaaaat	ggaaatgttc	acctacctgc	gctacgatgt	ggagggtcact	360
tttgtgatta	caagttctca	ggacccatcg	accaacgtaa	gccaggatgc	tcctgtactc	420
acacatcagt	taatgtacgt	accccccggt	ggtccagtgc	ccaaaaatcc	aagagactat	480
gcatggcaaa	catccacca	cccagagtgt	ttctggaccg	aggggaacgc	accaccaagg	540
atatccatcc	cctttatcag	tgtgggcaac	gcatacagtt	gcttttatga	tggatgggtcc	600
cactactcac	agacgggggt	gtatgggtac	aacaccctaa	acgacatggg	ccaattattt	660
gtcaggcacg	tgaatgaggc	aagcccgggt	gcggtgtcaa	gtgtagttag	gatttacttc	720
aaacccaaac	atgtgaaggc	atgggtcccg	agaccaccac	ggttgtgcca	atatgttaac	780
gcagcaacgg	tgaacttcac	tcctgaaggg	gtcactaagg	cacgtactga	tctcatgaca	840
aca						843

&lt;210&gt; 77

&lt;211&gt; 915

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 77

ggaatagaag	aaactattga	cacagtgtac	accaacgctt	tacaactgtc	tcagcccaaa	60
ccgcagaaac	aactcactgc	tcaatccacc	gcctcatcca	gcggagtcaa	ttcacaagaa	120
gtgccagcat	tgaactgtgt	ggagacggga	gcttctgggt	aagccatacc	cagcgacgtg	180
attgagacca	gacatgtcgt	caattacaaa	actagatctg	aatcaaccct	tgagtcattc	240
tttggttagat	cagcatgcgt	aaccatactg	gaagtagaga	acttcaatgc	cactaccgaa	300
tcggacaaga	aaaagcaatt	caccacctgg	ccaatcacat	acaccaacac	agtccagttg	360

cgcaggaaat	tgggaattctt	tacatactcc	agattttgatc	tggaaatgac	ttttgtcata	420
actgagaggt	accacacaag	taatacagga	catgctagaa	atcaagtgtg	ccaaataatg	480
tacataccac	cgggtgcgcc	aaggcccaca	gcacgggatg	attacacctg	gcaaagttca	540
tccaatccat	cagtgtttta	cacatatggg	agcgcgcctc	ccagaatgtc	tatcccatat	600
gttggcattg	ccaatgcata	ctcacacttt	tatgacgggt	ttgcccaggt	tcccctgaaa	660
gatgatacaa	ctgactccgg	tgacactttt	tatggattgg	tcaccatcaa	tgactttgga	720
acattggctg	tgaggggtgt	gaatgagttc	aaccctgcaa	ggataacatc	aaaggtcaga	780
gtttatatga	agcccaaaca	tgtgaggtgt	tggtgtccta	ggccaccgcg	cgcagtcccc	840
tatcgtgggtg	aaggggttga	tttcaaacaa	gattcaatca	cgccaataac	agcagtcacc	900
aatattaata	ccttc					915

&lt;210&gt; 78

&lt;211&gt; 936

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 78

tcaaaccact	tacatggagc	agaggcagcc	tatcagggtg	agagtatcat	caaaacagca	60
actgatactg	tgaagagtga	gattaacgcc	gaacttggtg	tggtccctag	tctaaatgca	120
gttgaaaactg	gtgcaacttc	caacactgaa	ccagaagaag	ccatacaaac	tcgcacagta	180
ataaatcagc	atgggtgtgc	ggagacgtta	gtggagaatt	ttcttggtag	ggcagcccta	240
gtgtcaaaga	aaagttttga	atacaagaat	catgcctcat	ccagcgcagg	gacacacaaa	300
aacttttttta	aatggacaat	taataactaag	tctttttgtcc	agttaagaag	aaagctggaa	360
ttattcacat	accttagggt	tgatgctgaa	atcaccatac	tcacaactgt	ggcagtaaat	420
ggtaataatg	acagcacata	catgggtctc	cctgacttga	cactccaagc	aatgtttgta	480
ccaactgggtg	ctcttactcc	aaaggagcag	gattcatttc	attggcaatc	aggcagtaat	540
gctagtgtgt	tctttaaaat	ttctgatccc	ccagctagaa	tgactatacc	ttttatgtgc	600
atcaactcag	catattcagt	tttttatgat	ggctttgctg	gatttgagaa	aaatggtcta	660
tatggaataa	accagctga	cactattggc	aacttggtgtg	tcagaatagt	gaatgaacat	720
caaccagttg	gttttacagt	gaccgttagg	gtttacatga	agcctaaaca	tataaaagca	780
tgggtccac	gaccaccgcg	aaccatgcc	tacatgagca	ttgctaattg	aaattacaaa	840
ggtagagata	cagcaccaaa	cacacttaat	gccataattg	gtaatagagc	gagtgtcaca	900
actatgcctc	acaacatagt	aaccaccggt	ccgggt			936

&lt;210&gt; 79

&lt;211&gt; 861

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence; Note =  
synthetic construct

&lt;400&gt; 79

aatgaccagc	acaatggggc	gategttgcc	aacacaacag	ctagcggacc	ttctaattcg	60
gaaagcatac	cggcacttac	tgcggctgag	actggccaca	catcgcaggt	tgtccctagc	120
gacaccatcc	agacaagaca	tgtgaaaaac	taccactcgc	gttcagagtc	caccatagag	180
aacttcctgt	gtagatctgc	ctgtgtgtac	tacaccacgt	acaacactca	gggcgagcaa	240
gcacatgata	aatacgcaag	ttggccaatc	acgactagaa	aagttgcccc	actgcgcagg	300
aagctggagt	tctttaccta	cctgcggttt	gatctcgaga	tcacgttcgt	gatcacgagc	360
gccagatca	catccacgaa	ccaaaaccag	gatgccccag	tactcacaca	tcagggtgatg	420
tatgtacccc	cagggggggg	ggtaccgcgc	agtgtggatg	actatagttg	gcagacttcc	480
accaatccca	gcattcttctg	gacagaaggg	aacgcacctc	ctcgtatgtc	aataccattc	540
attagtgtgg	gcaacgccta	cagcagcttt	tacgacgggt	ggtcacactt	tgaacaaacc	600
ggggtatatg	gattcaatac	ccttaataat	atggggactt	tgtacgccag	gcacgttaac	660

```

ggtgctagtc ccgggccagt caagagcacc attaggatat atatgaaacc taaacatgtg      720
aaagcgtgga tacctaggcc cccacggttg tgcgactatg tgaaatctgg caacgtcaac      780
tttgaaccaa aaggagtcac cgagagcaga ccactataaa agttagaaaa gacctcaagt      840
gggcacaggc tgacaacca c                                     861

```

```

<210> 80
<211> 7
<212> PRT
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence; Note =
        synthetic construct

```

```

<400> 80
Met Tyr Val Pro Pro Gly Gly
  1                      5

```

```

<210> 81
<211> 7
<212> PRT
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence; Note =
        synthetic construct

```

```

<221> VARIANT
<222> (0)...(0)
<223> Xaa = any amino acid

```

```

<400> 81
Met Tyr Xaa Pro Xaa Gly Ala
  1                      5

```

```

<210> 82
<211> 7
<212> PRT
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence; Note =
        synthetic construct

```

```

<221> VARIANT
<222> (0)...(0)
<223> Xaa = any amino acid

```

```

<400> 82
Phe Gly Xaa Gln Ser Gly Ala
  1                      5

```

```

<210> 83
<211> 7
<212> PRT
<213> Artificial Sequence

```

```

<220>

```

<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> VARIANT

<222> (0)...(0)

<223> Xaa = any amino acid

<400> 83

Thr Ala Xaa Glu Thr Gly His  
1 5

<210> 84

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> VARIANT

<222> (0)...(0)

<223> Xaa = any amino acid

<400> 84

Thr Ala Val Glu Thr Gly Xaa  
1 5

<210> 85

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 85

Gln Ala Ala Glu Thr Gly Ala  
1 5

<210> 86

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<221> VARIANT

<222> (0)...(0)

<223> Xaa = any amino acid

<400> 86

Met Xaa Xaa Pro Pro Gly Xaa  
1 5

<210> 87

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 87

Met Tyr Val Pro Pro Gly  
1 5

<210> 88

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 88

Met Phe Val Pro Pro Gly  
1 5

<210> 89

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; Note =  
synthetic construct

<400> 89

Met Tyr Val Pro Thr Gly  
1 5